

# FINANCIAL TIMES

Russia

Chernomyrdin back  
on centre stage

Page 2

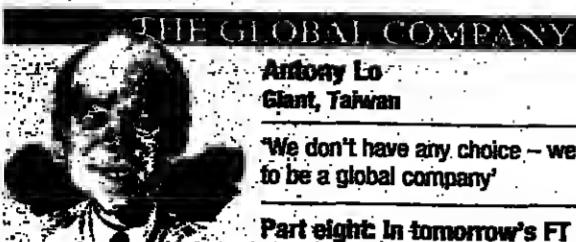


Nuclear power

Washington's dilemma  
over sales to China

Page 5

World Business Newspaper <http://www.FT.com>



THE GLOBAL COMPANY

Anthony Lo  
Giant, Taiwan

'We don't have any choice - we have  
to be a global company'

Part eight in tomorrow's FT

WORLD NEWS

Dutch in court  
battle to back  
EU policy over  
food imports

The Dutch government hopes to overturn a national court ruling which prevents it co-operating in the European Union's planned retreat from a policy of favouring imports from present and former Caribbean colonies. Page 16; Dutch sugar ruling, Page 8; Netherlands survey, separate section

Clinton call to cut emissions:  
President Bill Clinton came under attack over a call for greenhouse gas emissions to be brought down to 1990 levels over the next 15 years. US industrialists called the proposal excessive. The European Union called it too modest. Page 16

Cheapest repairs hope boosted:  
Prospects of lower-priced car parts and repairs in the European Union were boosted when the European Parliament voted to allow independent companies to continue making and selling spares and carrying out car repairs. Page 2

Serbia facing deadlock:  
Serbia could be hit by prolonged political deadlock after opposition Democratic party leader Zoran Djindjic said he would boycott elections. Page 4

Fast-track faces slowdown:  
President Clinton's bid for new "fast-track" trade negotiating authority appeared in trouble as a plan to push the legislation through the Senate hit procedural difficulties. Page 7

Greece resists pay policy:  
Greek unions will use a 24-hour general strike to put pressure on the government to ease its income policy. Page 4

Big fall in UK retail spending:  
Spending in British shops suffered its biggest one-month fall for six and a half years in September, as the death of Diana, Princess of Wales, disrupted the nation's shopping habits. Page 9

Mine blast injures 18:  
A landmine detonated by suspected Tamil Tiger rebels injured at least 18 people on a bus in eastern Sri Lanka.

Indian cabinet U-turn:  
The Indian cabinet decided to reverse its earlier decision to seek the dismissal of the Hindu nationalist government in the northern state of Uttar Pradesh, the Press Trust of India said.

CD ring 'boosted neo-Nazis':  
German police said they had arrested three men on suspicion of being part of a ring making pirated compact discs that helped finance neo-Nazis in Germany and Denmark. Digital hunt for video pirates. Page 8

Robot to operate soon:  
What is claimed to be the world's first operating theatre robot has been developed at Humboldt University medical school, Berlin. The robot, nicknamed "Otto", could be in use within a year.

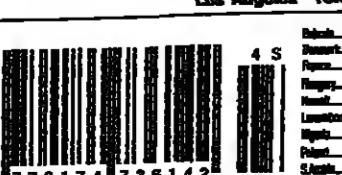
UK computer "bomb" ignored:  
Most small and medium-sized British companies have computer systems susceptible to the "millennium bomb" but few have taken steps to tackle the problem, says a Department of Trade and Industry study. Page 8

Markets

STOCK MARKET INDICES

New York Composite	1,014.27	(-46.17)
DAX 30	1,708.40	(-3.14)
Hang Seng and FORT	2,650.08	(-31.93)
DAX 100	4,171.45	(-31.99)
Mittel	5,142.8	(-77.71)
US LEHIGHPORT RATES	17,887.51	(+477.52)
Federal Funds	5.5%	
1-3 month Libor Yld	5.711%	
Long Bond	6.093	
Yield	6.419%	
OTHER RATES		
UK 3-mo libor	7.0%	(same)
UK 10 yr Gilt	10.425	(10.615)
UK 10 yr Gilt	9.03	(9.03)
Germany 10 yr Bund	101.71	(101.65)
Japan 10 yr JGB	108.85	(same)
NORTH SEA OIL (Average)	51.98	(10.33)
Brent Crude	51.98	(10.33)

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4 S

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Washington's dilemma  
over sales to China

Page 5

CD Text

Providing words  
to go with the music

Technology, Page 12

Today's surveys

Biotechnology  
The Netherlands

Separate sections

THURSDAY OCTOBER 23 1997

Fears mount that territory could be next victim of Asian currency crisis

## Hong Kong in turmoil as stocks fall another 6%

By John Riddings and Louise Lucas in Hong Kong and Edward Mortimer in London

Hong Kong's stock market fell more than 6 per cent yesterday, accelerating a rout this week as concerns mounted that the territory could fall victim to the currency crisis that has swept east Asia.

As Hong Kong's fall shook Asian markets and the share of UK companies exposed to the region, Tung Chee-hwa, the territory's post-colonial leader, vowed to keep the currency pegged to the US dollar. He conceded that this would mean higher interest rates. The prospect shook investor confidence. Money market interest rates rose sharply and the Hong Kong dollar came under pressure.

The fall in share prices, the biggest this year, sent the blue-chip Hang Seng index to a 13-month low and a combined decline of 14 per cent so far this week.

Other Asian markets felt the

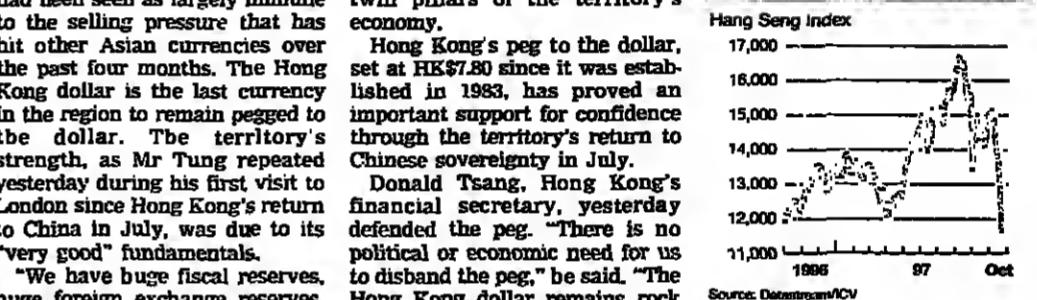
tremor. Shares in Taiwan fell over 2 per cent before regaining ground, while Malaysia's benchmark index closed 3.8 per cent down on the day. Only Japan and South Korea remained unshaken. Seoul investors were buoyed by news of a government rescue plan for troubled Kia Motors.

China to cut rates, Page 5  
Chilled by an ill wind, Page 15  
Lex, Page 16  
Currency hang-ups, Page 19  
Currencies, Page 23  
World stocks, Page 34



Yawning realisation: a Hong Kong trader takes a relaxed view of the biggest fall in the Hang Seng index this year. The blue-chip index has suffered a combined decline of 14 per cent this week. Picture: Reuters

Hong Kong stocks



Hang Seng Index

17,000

16,000

15,000

14,000

13,000

12,000

11,000

1986 1987 Oct

Source: Datamonitor/FCI

dollar over the past few days," said one trader.

China-backed shares continued to dive, prompting gloomy prospects for the Hong Kong debut of China Telecom today.

## Clinton move on greenhouse gases comes under fire

By Bruce Clark in Washington

President Bill Clinton called yesterday for a reduction in the emissions of greenhouse gases, produced mainly by fossil fuel burning, to 1990 levels over the next 15 years.

The proposal, which will define Washington's position in forthcoming negotiations on climate change, was described as an excess by US industrialists, while the European Union called it too modest.

Mr Clinton, caught between domestic lobby groups and his own belief that climate change presents a deadly threat to the planet, said countries should be allowed to meet the stabilisation target between 2008 and 2012. He also announced a wide-ranging list of incentives to US industry to reduce reliance on coal and oil through energy efficiency and greater use of renewable sources of power.

The proposal is much more cautious than the EU's call for the output of greenhouse gases to fall 16 per cent below 1990 levels by 2010. It also falls well short of the president's own suggestion four years ago that emissions might be stabilised by the end of the century.

Mike McCurry, the White House spokesman, said Mr Clinton had not anticipated when he made his initial statement, how fast US industrial output would grow. Any attempt to stabilise by 2000 "would most

likely wreck the world economy", he added.

The US Senate Energy committee immediately made clear that there would be no question of ratifying an accord on climate change, which may emerge from the forthcoming UN conference in Kyoto, Japan, unless developing countries also made firm pledges to limit their emissions.

"American consumers and workers will pay dearly for the [president's] proposal," said an official familiar with the panel's thinking, who added that Mr Clinton's plan might require a carbon consumption tax of up to \$50 per ton. A Senate has opposed even a modest carbon tax.

Dale Heydlauff, a vice-president of American Electric Power, said stabilising emissions by 2010 could cost the sector up to \$20bn.

In Brussels Ritt Bjerregaard, EU environment commissioner, said she was disappointed with the "very weak level" of US ambition. "This is not an adequate response to the global problems of climate change." The EU feels the US is reneging on commitments made at the earth summit in Rio de Janeiro in 1992 when it agreed with other nations to stabilise emissions at 1990 levels by 2000.

Additional reporting by Michael Smith in Brussels

UK government to push wave and wind power, Page 10

## Boeing hit by production costs

By Michael Skapinker in London and Daniel Bögl in New York

Boeing of the US said yesterday that its inability to meet surging demand for new aircraft had pushed it into loss in the third quarter and would reduce its earnings next year.

Boeing, the world's biggest aircraft maker, has been struggling for several months to increase its output to meet what it calls "the steepest production increases since the dawn of the jet age".

Philip Condit, chairman, said the company would take a \$1.6bn charge in the third quarter, results of which will be announced tomorrow. He said the disruption would cost Boeing a further \$1bn next year. The

company has taken on an extra 14,000 staff over the past year to try to meet its production targets.

Boeing's attempt to increase production to 43 aircraft a month by April, compared with 18.5 a month last year, has been hampered by shortages of staff, raw materials and components. It has suspended production of its 747 and 737 models for a month

in an attempt to catch up. The Boeing 747 is the world's largest civil aircraft and has 6m parts.

Analysts expressed surprise at the cost of the production difficulties and the third quarter loss.

They had been expecting earnings per share of 45c for the quarter. Joseph Campbell, an

Continued on Page 16  
Lex, Page 16

The sky's the limit for airline travellers, courtesy of Collins communications systems for two-way phone calls and faxes.

Rockwell

<http://www.rockwell.com>

## NEWS: EUROPE

# Hopes boosted for cheaper car parts and repairs

By Emma Tucker in Strasbourg

Prospects of lower prices for car parts and repairs in the European Union were boosted yesterday when the European Parliament backed a proposal to open the market to competition.

A parliamentary amendment, voted by an overwhelming majority, reversed a Council of Ministers proposal for an EU-wide law that could have given car manufacturers a monopoly over the supply of spare body parts.

MEPs voted to allow independent car parts and repairs companies to

continue producing and selling spare parts and carrying out car repairs throughout the EU. The move flies in the face of a Council decision to leave the market for car spares fragmented along national lines.

The Council must now decide whether to adopt the amendment, which forms part of a wider draft EU law aimed at harmonising the legal protection of industrial design.

Different countries have different

rules concerning the design protection given to car spare parts such as bumpers, bonnets, wings, windscreens and lamps.

Britain, for example, does not protect spare parts and has encouraged the growth of an independent spares market. By contrast, all car parts are protected in France and only the original manufacturers are entitled to replace damaged or stolen parts. Other member states fall between the two.

In order to create a single market the Commission proposed a "repairs clause" which would have made it possible for independent suppliers to operate and sell anywhere in the EU, but only after paying a "fair and reasonable" royalty to the original car manufacturer as compensation for its investment in the design of the spare part.

Motoring organisations, consumer groups and insurance companies backed the move, believing it would

lower the price of spare parts in Europe. However, carmakers opposed it, arguing it was only fair they should receive protection against the reproduction of car spare parts, whose design requires time and investment.

They also said opening up the market to independents would compromise safety in the EU.

According to the European Campaign for the Freedom of the Automotive Parts and Repair Market, vehicle

owners in the EU spend about Ecu88bn (\$160bn) on repairs every year, of which about Ecu4bn is the cost of spare parts.

At its first consideration of the draft law the Council opted to allow member states to establish their own rules. This meant parts made legally in one member state could be refused access to another member state.

Yesterday's amendment by the Parliament reinstates the "repairs clause". If the Council does not accept it, the proposal will go to conciliation between the Council and the Parliament.

## Chernomyrdin tipped for president

By John Thornhill  
in Moscow

Boris Yeltsin, Russia's president, yesterday heaped praise on his prime minister, Victor Chernomyrdin, for helping to resolve a confrontation with parliament over economic policy by agreeing to consult MPs more fully in the future.

The recent turn of events completes a striking transformation in Mr Chernomyrdin's reputation, putting him back at the centre of the Russian political stage and sparking speculation he may succeed Mr Yeltsin in 2000. It was previously thought

prime minister for his seeming reluctance to embrace radical reform.

Mr Chernomyrdin won plaudits from the president and parliament for calming the latest clash over economic policy by agreeing to consult MPs more fully in the future.

Andrei Ilarionov, head of the Institute of Economic Analysis, said there was a possibility a better tax code could yet result from the present talks. "There is no guarantee but this could prove a victory for the government if the liberal deputies can make improvements," he said.

Mr Chernomyrdin had been largely marginalised by Anatoly Chubais and Boris Nemtsov, the two first deputy prime ministers, who had been busy setting the government's reformist agenda.

The Nezavisimaya Gazeta newspaper said Mr Chernomyrdin had become "candidate number one for the post of Russian president in the year 2000", commanding respect across the political spectrum. In an interview with the influential Itogi television programme on Sunday night, Mr Chernomyrdin did little to deny his presidential ambitions, though he refused to state them explicitly.

Mr Chernomyrdin's renaissance could lead to a softening of the most radical edges of the government's reform programme. One of the biggest battles is likely to be over the new tax code, which Mr Yeltsin offered to withdraw from parliament for further revision.

Mr Chubais, who argues

adoption of the tax code is critical for next year's budget, said a joint government and parliamentary commission decided yesterday not to withdraw the code from parliament, and press ahead with its second reading.

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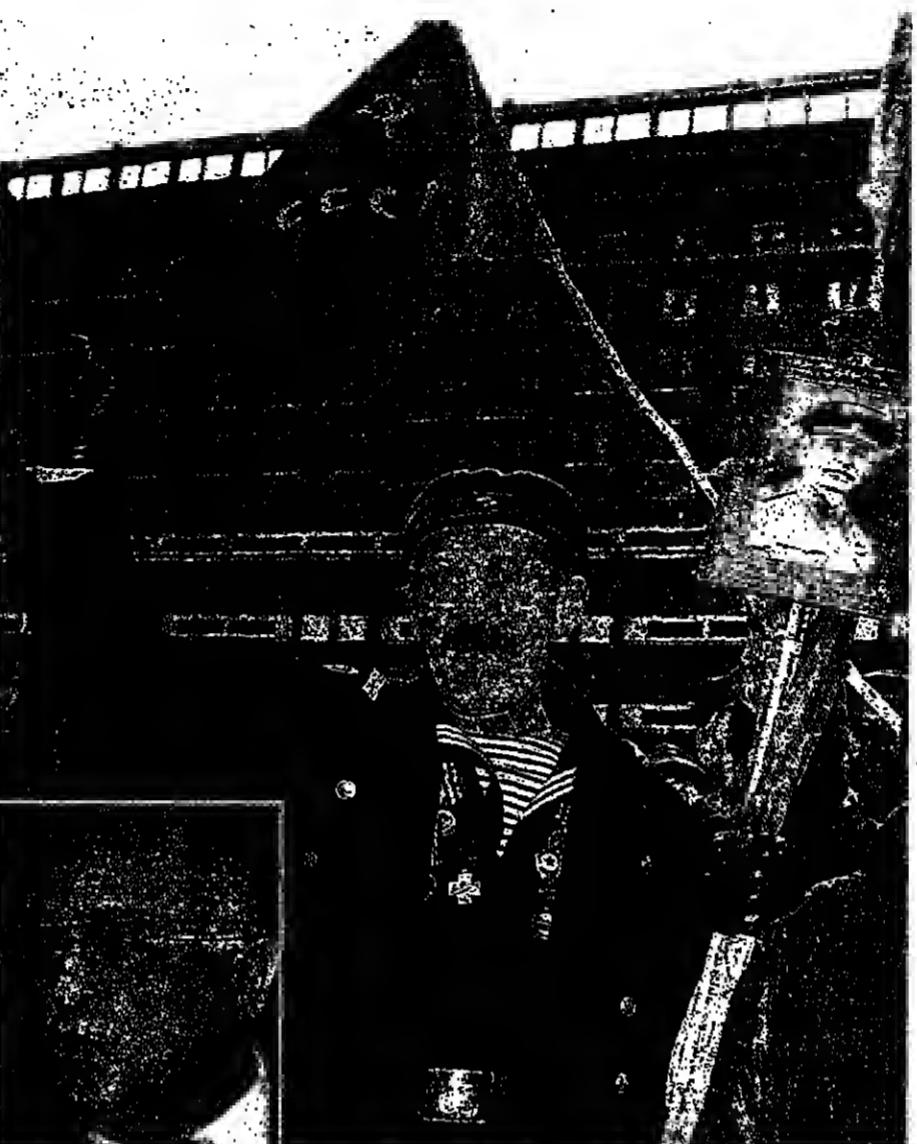
Mr Chernomyrdin's virtue as a consensus-seeking politician have been highlighted during the government's latest skirmish with parliament. As a former central committee member of the Soviet Communist party, Mr Chernomyrdin has personal ties with many of the present Communist party leaders. He is also the leader of the Our Home is Russia movement, which forms the second biggest faction in parliament.

As the ex-head of Gazprom, the giant gas monopoly, Mr Chernomyrdin also commands the respect of the country's business leaders, who control much of the media and have been seeking to boost his influence.

But while the political elite in Moscow may be singing Mr Chernomyrdin's praises, it is not clear the rest of the country is similarly minded. Opinion polls show Mr Chernomyrdin has the support of just 2 per cent of the population.

A Communist supporter keeps the flag flying outside the Duma yesterday despite his party's backtracking on a no-confidence motion in the government. Inset: Victor Chernomyrdin has won praise from Boris Yeltsin for defusing the row over economic policy

Readers



## MEPs go on the attack in chocolate war

By Emma Tucker

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## NEWS: EUROPE

## NEWS DIGEST

**EU told not to penny-pinching**

Squabbling over costs should not be allowed to paralyse the European Union's historic expansion beyond the old Iron Curtain, two EU leaders said yesterday. Jacques Santer, Commission president, said the 15 member countries should not view expansion solely in terms of what they pay into, and receive from, EU coffers.

"We must guard against falling into the trap of a purely national, penny-pinching approach," Santer told the European Parliament during a speech on the EU executive's work programme for next year. Jean-Claude Juncker, the Luxembourg prime minister, whose country holds the rotating EU presidency, said EU expansion faced paralysis if members continued arguing over who paid for embracing former communist countries.

The EU executive, in a policy document for the next century, proposed in July that the bloc should open membership talks early next year with five out of 10 eastern candidates - Poland, Hungary, the Czech Republic, Slovenia and Estonia. *Reuters, Strasbourg*

**HUNGARY-ROMANIA TIES**

**Horn warns on nationalists**

Csaba Horn, the Hungarian prime minister, who is on a visit to Romania, yesterday called for governments in both countries to distance themselves from radical nationalists. The Romanian government responded to Mr Horn's visit, by announcing the creation of a Hungarian-language university for the country's 1.6m-strong Hungarian minority.

However, Victor Ciorbea, the Romanian prime minister, said there would be no restoration of the historic Hungarian university in Cluj, which was made exclusively Romanian-language under the former communist dictatorship.

The governments also agreed on new border crossing points, a joint investment bank and a new road linking the two countries, but much of the discussion was focused on minority rights. Mr Horn asked that the Romanian coalition, in which the party of Hungarian Romanians participates, should "clearly distance itself" from nationalist voices. He promised to do the same in Hungary. *Anatol Lieven, Budapest*

**BULGARIAN FILES****Intelligence agents named**

Bulgaria's reformist government yesterday published the names of 23 leading public figures who had worked for the communist-era State Security Service. The step made use of a new law intended to purge some of the legacy of communism. The list read out in parliament by Bogomil Bonev, interior minister, included 14 members of parliament, four magistrates and a banker.

But of these, only a handful were accused of informing on compatriots, while the rest were considered to have been tainted simply by being part of Bulgaria's intelligence and counter-intelligence network.

Ivan Kostov, Bulgaria's prime minister, has said government officials who worked for the state security service under communism, in whatever guise, will be dismissed. But the list was likely to disappoint Bulgarians who have applied to see the files maintained on them by up to 100,000 fellow citizens working as agents and informants for the communist secret police and who want to know who the informers were. *Reuters, Sofia*

**BOSNIAN SERBS****More peacekeepers for polls**

Nato plans to reinforce peacekeeping operations in Bosnian Serb territory in case of any trouble during elections in Republika Srpska, Bosnia's Serbian entity, in late November, Nato officials said yesterday.

"We need a very modest reinforcement," a Nato official said. Nato's permanent ambassadors discussed the issue at their regular meeting yesterday and agreed in principle to go ahead. The official declined to discuss figures but said the requirement for the ballot on November 23 would be somewhat less than September's reinforcement of around 3,000 extra men brought in to help safeguard Bosnian municipal elections. *Reuters, Brussels*

**ECONOMIC WATCH****French output improves**

French industrial production rebounded in the summer, confirming that the economy is in upswing. Seasonally adjusted figures released yesterday by Insee, the government statistics agency, showed production during the combined months of July and August was up 3.8 per cent on June.

The push has continued to come from a strong export performance on the back of a weaker franc. This was largely reflected in a 5.2 per cent increase in the automotive sector. But Insee also detected signs of improved domestic demand. It is still not clear to what extent to which the improvement represents stock-building or real demand. But an Insee official said yesterday: "This is an important rebound; we are on the right track." *Robert Graham, Paris*

**MANDELA LAUNCHES NEW INVESTMENT INITIATIVES**

Dynamic investment opportunities in the Eastern Cape of South Africa are being launched by President Mandela at an investment conference in East London on 7 November 1997. The government driven Fish River and Wild Coast Special Development Initiatives (SDIs) are the first of their kind to be launched in South Africa.

Opportunities to be launched include:

- Investment in Industrial Development Zones (IDZs), providing high tech industrial parks, with direct access to port facilities and state-of-the-art infrastructure, creating an ideal investment location for exporters. A range of incentives, such as a six year fax holiday, are targeted at manufacturers.
- Investment opportunities in the provision of infrastructure, which includes a possible port at Coega, near Port Elizabeth and infrastructure along the Wild Coast.
- Investment opportunities associated with the forestry sector.
- Investment opportunities in malaria free game and nature reserves.

Eastern Cape Investment Conference

Date: Friday 7 November 1997  
 Venue: East London City Hall  
 Oxford Street  
 East London  
 South Africa  
 Inquiries: Leigh Angelo  
 tel: +27 11 784 2588  
 fax: +27 11 783 4735  
 email: leigh@msomi.co.za

Socialist members of finance commission discreetly force central bank towards greater openness

**Leftwingers take on Bank of France**

By Robert Graham in Paris

Leftwing parliamentarians have begun a discreet battle to force the Bank of France towards greater openness over monetary policy.

The first shots were fired this week when the parliamentary finance commission held a meeting with the Bank's monetary council, headed by Jean-Claude Trichet, the governor, and asked for an

explanation of a recent interest rate increase.

The only other such meeting in recent years took place just after a new nine-person monetary council was formed in 1993.

This week's encounter provoked a boycott by the opposition centre-right members of the finance commission. They said the move was a deliberate attempt to interfere with the central bank's independence

in monetary matters.

The meeting initially took the form of a summons by Henri Emmanuelli, the Socialist head of the finance commission, after the Bank of France raised its intervention rate by 20 basis points in line with the German Bundesbank on October 9.

Mr Emmanuelli made it clear he felt France's unprecedentedly low inflation gave little

justification for the rate increase.

Even members of the government privately expressed unhappiness at the timing. The Bank of France explained its action as a pre-emptive move against inflation 18 months to two years down the line, while also giving a strong signal with the Germans on a commitment to a "hard" euro.

The Bank of France is understood to have bank's independence; but we consulted lawyers about the summons to parliament, and only agreed when it was toned down to an "invitation" to appear before the finance commission. The German and French short-term rates are aligned at 3.30 per cent. In this atmosphere a further rate rise by the Bundesbank, replicated by the Bank of France, is likely to produce a more hostile reaction from the politicians.

**Irish consensus on North dented**

Candidates fall out over Ulster as poll approaches; Sinn Féin may be the beneficiary

**I**t used to be fashionable to believe there was little to distinguish Ireland's main political parties on the difficult issue of Northern Ireland. But that view has recently been badly dented with a row over Mary McAleese, the Belfast law professor standing as Flanna Fail's candidate to succeed Mary Robinson as Irish president.

The divisions among Ireland's political elite come at a time when the Republic has to agree a stance on Northern Ireland, with peace talks due to conclude next May.

With a week to polling day, the main opposition Fine Gael has been trying to paint Ms McAleese as a bardine nationalist, to harness widespread public antipathy in the Irish Republic towards Northern Ireland and its so-called "Troubles".

The allegations, which she denies, stem from a leaked Irish foreign ministry report suggesting she was "pushing a Sinn Féin agenda" during the recent British general election.

The deficit on the current account, embracing trade in goods, services such as tourism, investment income and certain unilateral transfers, shrank in the period to DM12.2bn from DM18bn.

August is traditionally a weak month for exports; they rose only 13 per cent against the same 1996 month, as imports rose 14.4 per cent. But the August visible trade surplus, while declining to DM6.6bn from DM11.1bn in July, was higher than the DM2.3bn of August 1996.

August's DM5.3bn current account deficit was higher than July's DM2.7bn shortfall, but lower than the DM5.9bn deficit of August last year.

Yesterday's figures suggested this year's visible trade surplus will exceed last year's post-unification high of DM10.8bn, while the current account deficit is expected to be less than the previous low of DM19.7bn reported last year.

The continuing weakness of domestic demand was highlighted yesterday by the federal association of medium and large retailers, which reported that department store sales fell 4.2 per cent in value between August and September.

It said warm weather depressed demand for autumn fashions but warned no improvement had occurred so far this month.

Lacklustre conditions at home and a partial recovery of the D-Mark helped contain the rise in German producer prices in September. The statistics office said the producer price index rose 0.1 per cent between August and September, reflecting a 1.5 per cent drop in oil product prices.

politics will hardly matter, as in practice the presidency has only limited ceremonial powers. But the row has for the first time exposed deep differences over Northern policy.

Michael Laver, professor of political science at Trinity College, points out that although all main parties profess a bipartisan approach, Northern Ireland has often been the undoing of Fianna Fail, from allegations that ministers were involved in arms smuggling in the 1970s to the defection from the party of what were to become the Progressive Democrats - Fianna Fail's current coalition partners.

Prof Laver believes the issue could put strain both on the coalition and between the main parties once the shape of a settlement emerges at the Northern Ireland multiparty talks. Any settlement would have to be passed by parliament and approved by the country in a referendum next May.

Dick Spring, the Labour party leader, yesterday accused the big parties of reverting to the politics of the civil war, fought over the treaty partitioning Ireland, backed by Fine

Gael and opposed by Fianna Fail. Mary Banotti, the Fine Gael candidate, had to apologise for remarks suggesting Fianna Fail had somehow got second best in having to recruit a candidate from Northern Ireland.

The Northern factor had already surfaced with the early speculation that John Hume, Northern Ireland's best known nationalist MP, might put himself up.

Ms McAleese has found what many Northern nationalists find when they come south - that the country they thought of as theirs thinks of them as foreigners.

Ironically, Northern Protestants who settle in the south are often given a warmer reception.

"Protestants would be seen to be making a statement by living in the south," says a leading Dublin banker.

The real winner in all this appears to be Sinn Féin. In publicly endorsing Ms McAleese, Gerry Adams, the Sinn Féin president, seems to be calculating that if she wins, he can claim her as Sinn Féin's candidate.

But if she is seen to lose because of anti-Northern bias, it will fuel the sense of victimhood and isolation which has long been a rallying cry for Sinn Féin in Northern Ireland's "occupied six counties."

John Murray Brown

**"...best little PC."**

-Byte, 4/97, P. Woyner

**"Gorgeous."**

-What Video & TV, 6/97, B. Fox

**"...innovations galore..."**

-Mobile Computing, 12/96, M. Campanelli

**"Damn fast."**

-The Paperless Office, 2/97, N. Ballard

**"...better than sex!"**

-Modern Loving, 7/97, N. Lam



(Okay, so we made the last one up.)

**PHILIPS**

Let's make things better.

# Poll boycott threatens Serbia with deadlock

By Guy Dimmore in Belgrade

Serbia yesterday faced prospects of a winter of political deadlock after an opposition leader said he would boycott forthcoming elections.

Zoran Djindjic, leader of the opposition Democratic party, said he would boycott a new round of presidential elections which have been called by the ruling Socialists. However, his decision may help the ruling party at a time when it is increasingly beleaguered.

Serbia was left without a president this month after a turnout below the legal threshold of 50 per cent invalidated an election in which Vojislav Seselj, the ultra-nationalist Radical party leader, defeated Zoran Lalic, a protégé of Yugoslav President Slobodan Milosevic. A boycott campaign by Mr Djindjic in protest

against unfair electoral conditions contributed to the low turnout.

Mr Djindjic said no progress had been made in opening up state-run media and that consequently he had not changed his mind on a boycott.

Analysts said boycott by centrist parties, combined with general voter fatigue, would again block a victory by Mr Seselj and play into the hands of Mr Milosevic, leaving him weakened but still Serbia's most powerful figure.

The Socialists have announced fresh elections for December 7 but have not said whether Mr Lalic would stand again. The Radicals are due to meet today to decide their position.

Mr Milosevic, who was barred by the constitution from running for a third term as Serbian president, has also seen his Socialist

coalition lose its majority in the Serbian parliament because of Radicals' gains.

The task of the Yugoslav president is made harder by the plight of Belgrade residents, many of whom reacted with indifference to the news of more elections.

Many fear a tough winter because of reduced gas supplies and more expensive food. Several hundred elderly people, some in wheelchairs, demonstrated in protest at delays in their pensions.

"It is going to be a harsh winter," said Ljusa, a retired worker, standing in front of the empty counters of a state butcher which, when it has stocks, sells cheaper meat than private stores. "Every winter gets worse and worse. We are fed up with elections. Nothing changes."

Mr Milosevic, who was barred by the constitution from running for a third term as Serbian president, has also seen his Socialist

coalition lose its majority in the small republic of Montenegro, his close ally in the low turnout.

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Mr Bulatovic, the current president whose term expires in January, rejects the results and accuses his rival of fraud. He said the Organisation for Security and Co-operation in Europe (OSCE), which gave the elections a clean bill of health, had closed its eyes to alleged irregularities in the interests of a hostile west.

About 2,000 Bulatovic supporters gathered in Podgorica, the Montenegro capital, yesterday for a second day of protests whipped up by nationalist propaganda launched by Serbia's state media against Mr Djindjic, who is portrayed as a secessionist close to ethnic Albanians and Moslems.



Zoran Djindjic: declared he would boycott presidential poll in Serbia in protest at unfair electoral conditions

"Milosevic is preparing for war in Montenegro," said Mr Djindjic, referring to the nationalism sparked by the Serbian leader in the late 1980s at the outset of secessionist wars in Slovenia, Croatia and Bosnia.

# Schneider seeks to share the blame

By Graham Bowley  
in Frankfurt

Former property tycoon Jürgen Schneider yesterday made his most revealing confession to date in what has turned out to be Germany's biggest post-war corporate fraud trial.

But Mr Schneider, whose property empire collapsed in 1994 under debts of more than DM55m (\$2.8m) again insisted that some of the country's banks share some blame for their willingness to finance his plans.

Mr Schneider, once one of Germany's wealthiest citizens, is charged with duping banks and creditors into making bigger loans than his development projects justified. He has been vilified by the German public for the huge debts he left behind, which left many small construction companies with unpaid bills.

At the same time he was hailed as a hero by some in eastern Germany, where he was responsible for redevelopment of some city centres after German reunification.

Mr Schneider and his wife fled Germany secretly just before the collapse of his property business. They returned to Germany in 1996.

impudent banks, who were criticised for their apparent willingness to finance Mr Schneider's rapid expansion.

The trial caught the public's attention last month when Hilmar Kopper, former chief executive of Deutsche Bank and one of Germany's leading bankers, admitted that Deutsche Bank made "inexcusable errors" in lending to Mr Schneider.

However, Mr Kopper insisted that top officials at Deutsche Bank - Mr Schneider's biggest single creditor - were not responsible for the lack of supervision over Mr Schneider's finances.

But Mr Schneider admitted yesterday to altering plans for a building in Frankfurt after they had been given approval by the building authorities. He said he was unlikely to have been given bank loans without the approval of the authorities and that the banks probably would not have known the alterations were made after the authorities had seen the plans.

Mr Schneider and his wife fled Germany secretly just before the collapse of his property business. They returned to Germany in 1996.

# Cartel office intervenes in travel bid

By Frederick Stödermann in Berlin

Moves to consolidate Germany's travel industry suffered a setback yesterday when the federal cartel office put a major acquisition in the sector under threat. The country's travel industry is the biggest in Europe.

The cartel office in Berlin said it had requested the right to examine the bid by Preussag, the steel and engineering group, for the transport and tourism companies Hapag-Lloyd and TUI.

The cartel office, which in the past

has often sought to pursue a tougher line in competition cases than the European Commission in Brussels, said the case should be handled at national level, as the effects of the bid would be predominantly felt in Germany. Preussag's DM2.8bn (\$1.6bn) bid last month for Hapag-Lloyd, which is owned by banks and corporate investors, was originally due to be handled by Brussels because of its size.

In particular, the cartel office,

which has secured the backing of the federal economics ministry, said the Hapag-Lloyd deal would limit

competition in the charter flight and package holiday business. More than 60 per cent of the market would effectively be controlled by a duopoly made up of Preussag and Condor/NUR, subsidiaries respectively of the national carrier Lufthansa and Karstadt, a retailing group, which are also in the process of merging. The cartel office is already considering the Condor/NUR link-up.

The cartel office is also concerned about the presence of shareholders with stakes in both the proposed Preussag-led venture and Condor/NUR.

Preussag, which is seeking to move out of its traditional base in commodities and focus on its services and transportation businesses, said it was not surprised by yesterday's announcement as the cartel office had expressed early interest in the Hapag case.

The company said the German market was "no island" and that there was already competition from non-domestic travel and tour companies. This would increase following the introduction of the euro, the proposed European currency set to be introduced in 1999.

# Romania seeks finance for reactor

Romania is seeking financing for the second of five reactors to be built at eastern Europe's sole western-designed nuclear power plant, a nuclear power official said yesterday. Reuters reports from Bucharest.

"Action is under way at present to attract financing sources for the completion of Cernavoda's second reactor," said Teodor Chirica, spokesman for the nuclear power group at Renel RA electricity authority.

"According to estimates, \$750m is needed to complete the work."

The first of five 700-MW reactors planned at Cernavoda on the River Danube, east of Bucharest, came on stream last April. The reactors use Canadian-developed technology.

Cernavoda provides about 10 per cent of Romania's power needs and is viewed by the centrist government, which came to power a year ago, as a priority in its campaign to overcome declining crude oil and gas reserves and cut fuel imports.

The project has been co-ordinated by the state-run Renel electricity utility with assistance from a consortium grouping Atomic Energy of Canada Ltd (AECL) and Italy's Ansaldo SpA.

Plant officials suggested earlier this year that AECL would help secure financing for the second reactor, which was 25 per cent complete.

Mr Chirica suggested that Romania might call a tender to find suitable funding for the project.

international autumn strikes over budget proposals scheduled for November.

Greek workers have received substantive real wage increases over the past three years despite a gradual tightening of fiscal policy. Next year's budget is expected to limit nominal increases in the public sector to 4 per cent, in line with a projected decline in inflation of 4.9 per cent to below 3 per cent.

GSEE has demanded a 9 per cent across-the-board increase on the grounds that real wages are still below 1990 levels. Union officials say they are not convinced that the fall in inflation, now at its lowest level for almost 30 years, can be maintained.

This year's round of strikes reflects public-sector workers' growing job insecurity after a freeze on civil service hiring and attempts to introduce private-sector management standards to public corporations.

The 1998 budget is expected to bring job losses as the Socialists try to hold down government spending by merging or shutting administrative organisations.

# Greek unions strike over wages policy

By Karin Hoppe in Athens

Greece's trade unions will today use a planned 24-hour general strike to put pressure on the country's income policy.

The move comes despite government efforts to lower the country's historically high inflation.

The Socialist government plans to limit real wage increases for next year to 1.5 per cent as part of Greece's effort to meet the Maastricht inflation and budget deficit targets for eventually joining the single European currency.

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### INVITATION FOR INTERNATIONAL TENDER FOR PURCHASE OF EQUITY IN H.B.I. d.o.o.

Zagreb, Kneza Borne 2  
Croatia

#### Selling object

Equity in H.B.I. d.o.o. amounting 49.95% of total capital value of the company, registered in the Book of equity H.B.I. d.o.o. and in Commercial Court in Zagreb with all belonging rights and liabilities deriving from that equity in accordance with the Company Law of the Republic of Croatia and Contract of H.B.I. d.o.o.

The remaining two shareholders in H.B.I. d.o.o. retain 50.05% of total equity capital value.

#### Information about the H.B.I. Company

H.B.I. d.o.o. is a legal person with limited liability registered at Commercial Court in Zagreb MBS (registered number) 080026217.

The company is domiciled in Zagreb, Ulica Kneza Borne 2, Croatia.

The company owns the Hotel Sheraton Zagreb without encumbrances in favour of a third party.

The H.B.I. d.o.o. has liabilities relating to the third parties amounting 25,700,000 DEM taken for building the Hotel Sheraton which must be settled in three years.

#### Offer

All offers must be accompanied by:

- information about a prospective shareholder and if the prospective shareholder is a legal person, also by a document from Court register
- a price including a payment conditions, dates and a guarantee
- other advantages of a prospective buyer

A deadline for submitting the offers is 8 days after this announcement has been published. Tenders should be delivered in closed envelope with remark "Tender documentation - do not open", on the address State Agency for Deposit Insurance and Bank Rehabilitation, Ulica Grada Vukovara 78, 10 000 Zagreb, Croatia.

Tenders received after this deadline shall not be taken into consideration.

Participants will be informed about the results within 30 days after the advertisement has been completed.

The Agency is not obliged to accept any received tender.

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## China to cut rates in bid to boost growth

By James Harding in Beijing

China will cut interest rates today in a move to check the slowing rate of economic growth and ease the debt burden on state-owned enterprises.

The People's Bank of China, the central bank, yesterday announced an average 1.5 percentage point fall in base lending rates and a 1.1 point cut to deposit rates in response to calls for a boost to the economy.

Earlier this week, the State Statistical Bureau reported that economic growth in the third quarter of this year had slowed to 8 per cent, below the government's target of 9.5 per cent growth for 1997 and the actual rise of 9.7 per cent last year. Gross domestic product grew by 9.0 per cent in the first nine months of this year, the SSB said.

Inflation has also fallen sharply this year. The economic data released this week showed China's retail price index up only 1.3 per cent for the first three quarters of 1997 and at zero per cent for September.

The central bank said the rate cut is "in response to declining prices and is designed to lower interest costs for enterprises, support the reform of state-owned enterprises and promote sustained, rapid and sound national economic development."

From today, the benchmark annual interest rate on one-year term deposits will be reduced to 5.87 per cent from 7.47 per cent. The rate for short-term loans of less than six months, for example, will be brought down to 7.65 per cent from 9.18 per cent.

The reductions, the first adjustments this year after two rate cuts in 1996, were broadly welcomed by analysts who expected the move would stimulate the sluggish stock markets as well as reinvigorate the state sector.

China has rapidly curbed



Zhu Rongji: soft landing

the double-digit inflation that peaked in 1994 and Zhu Rongji, vice premier in charge of the economy, has been widely credited for engineering a soft landing.

However, the slowdown in the GDP growth rate and the fall in inflation has prompted concern that China's economic growth may be faltering.

China has pledged to accelerate the pace of state enterprise reform and economists calculated the interest rate cuts were intended to ease the potentially painful process of restructuring state industries.

Investors in Shanghai and Shenzhen speculated that the loosening of credit policy might also lift the recently lacklustre stock markets. One analyst at Guotai Securities, the domestic stockbroker in Shanghai, said: "This is the government's way of giving an indirect push to the securities markets."

Share prices fell yesterday ahead of the announcement, but recovered most of their early losses on rumours of the imminent rate cut. The Shanghai foreign currency B share index closed down 0.85 per cent at 70.83 points and the Shenzhen equivalent closed down 1.02 per cent at 125.55 points.

## Australian dollar falls on Asian crisis

By Elizabeth Robinson  
in Sydney

The Australian dollar sank to its lowest level against the US currency in two-and-a-half years yesterday on concerns at the country's exposure to the Asian currency crisis.

The Australian dollar's fall to 71.22 US cents from 72.84 US cents was sparked by a report by Goldman Sachs, the US investment bank, which warned that the recent currency and economic crisis in south-east Asia was likely to result in a "major economic shock" for Australia.

It said that devaluations of Asian currencies - Thai, Indonesian, Malaysian and Taiwanese - had led to sharp depreciations against the dollar and would reduce Australian exports. About 52 per cent of Australian exports go to Asia.

Peter Costello, treasurer, dismissed the report, saying the impact on Australian exports would "hardly be measurable... Our biggest trading partners are still Japan, the US, Korea, New Zealand, and of course they are strong economies... that won't be affected."

The report said: "Initially, the Asian currency devaluations will substantially cut import demand from the region as consumer spending recols in reaction to high real interest rates and the reduced purchasing power of their currencies."

Since the Asian currency crisis began, Mr Costello has

stressed that Australian exports to the region have been growing up to 20 per cent a year, limiting the impact of any downturn.

The Goldman Sachs report suggested Australia was unlikely to achieve its target of 4 per cent economic growth in 1998. Government figures published yesterday showed inflation falling to its lowest level in 35 years, which John Howard, prime minister, said boded well for economic growth.

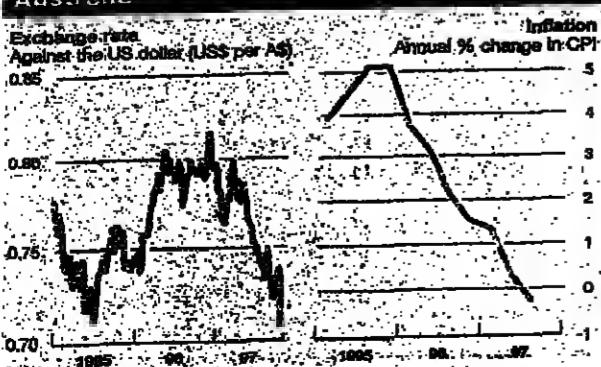
The Goldman Sachs report said continued falls in inflation had "largely blunted the economic effects of the Reserve Bank of Australia's 250 basis point cut in short-term interest rates in the past 18 months".

Yesterday's publication of the headline consumer price index for the September quarter showed a 0.4 per cent fall, the second consecutive drop; it was down 0.3 per cent over the year. But the underlying rate rose 0.3 per cent in the quarter and 1.5 per cent over the year.

The fall in the headline rate was largely due to lower mortgage rates and lower health costs after a scheme came into effect in July to encourage people to take out private health insurance.

With underlying inflation at 1.5 per cent, well below the RBA's target range of 2-3 per cent, many observers expect another rate cut by the end of the year. Mr Howard said low inflation "bodes well for very strong economic growth, and that bodes well for employment."

### Australia



## US nuclear suppliers hover over China

By James Harding in Beijing and Bruce Clark in Washington

When Qinshan Nuclear Power Plant, China's first nuclear power facility, sealed a multi-billion dollar contract last year to buy high-technology reactor equipment, Fred Sperry, president of Westinghouse in China, was invited to the signing ceremony.

But, he quips as an observer not a contractor, the deal went to Atomic Energy of Canada Ltd (AECL). Westinghouse, the US energy group, and other American suppliers of nuclear power equipment are barred by the US government from selling its reactor equipment to China.

Washington has refused to endorse a 1985 nuclear co-operation agreement that would allow nuclear sales to China, objecting to Chinese exports of nuclear technologies to third countries such as Iran and in protest against the 1989 Tiananmen Square massacre.

But an unlikely alliance of US business and Beijing officialdom hopes the White House is poised to reverse the policy. One of the few concrete commercial achievements expected from

next week's Sino-US summit is approval for sales of US civilian-use nuclear equipment or, at least, a commitment from President Bill Clinton for a lifting of the ban in the near future.

In recent weeks, the US has moved closer to certifying the agreement and this week Robert Einhorn of the US State Department came to Beijing to discuss nuclear co-operation ahead of President Jiang Zemin's visit to the US. But, US officials say, certain conditions must still be met, particularly a written pledge that China will not export nuclear technology to Iran.

Following Mr Einhorn's arrival, China announced that nuclear co-operation with Iran had stopped "because of some disputes over the contract", which they hope will be "conducive to progress" on Sino-US co-operation. Privately, Chinese officials say they are "confident" that an agreement is imminent.

Expectations of progress also rose in Washington after 16 senators from across the political spectrum wrote to President Clinton saying they "supported the administration's efforts" to implement the nuclear accord.

Conscious that concern over China's alleged exports of

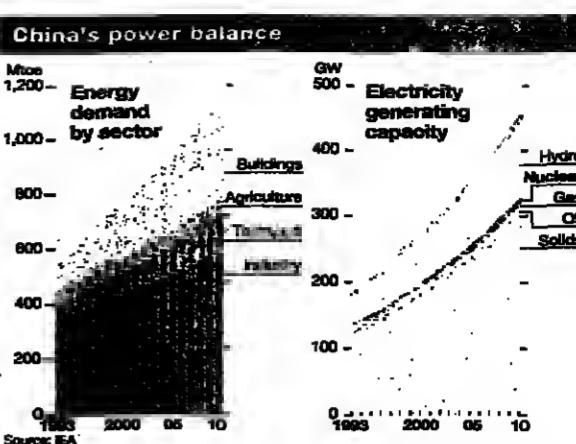
missiles technology and precursors for chemical weapons is still running high, the senators said progress on the nuclear front could be a "useful example" for negotiations on other issues.

Newt Gingrich, the speaker of the House of Representatives where anti-Beijing sentiment runs higher than in the Senate, has also made clear he will not give floor time to any fresh legislative moves against China before the summit. So it seems improbable that Congress will attempt to obstruct the nuclear accord's implementation by changing the preconditions.

A relatively small and, some say, oversupplied market today, but future prospects explain Westinghouse's energetic lobbying. Other US companies such as General Electric and ABB Combustion Engineering Nuclear Systems would be obvious competitors in the Chinese market if Washington approves sales of US-made equipment.

Zhang Huizhi, vice-president of the China National Nuclear Corporation, says installed capacity of China's nuclear power stations is scheduled to quadruple by 2003. By 2020, China is expected to have increased nuclear energy output to 6 per cent of national electricity generating capacity.

US companies have calculated that the Chinese market for nuclear reactors and related supplies could amount to over \$60bn during the next 15 years. With a bilateral trade deficit growing to an estimated \$40bn this year, the US



administration has been susceptible to arguments that freezing up nuclear sales might make an indentation on the trade imbalance.

The Qinshan plant, a pristine white-washed compound that stands out against the soupy, polluted skies and the brown waters that lap the litter-strewn coastline south of Shanghai, is evidence of how the nuclear industry can get by using technologies from suppliers outside the US. Lin Deshun, senior engineer and deputy general manager at the domestically built and designed plant, says: "China's nuclear power sector can develop without US equipment. It does not

matter where the machinery comes from."

Zhang Huizhi, vice-president of the China National Nuclear Corporation, says installed capacity of China's nuclear power stations is scheduled to quadruple by 2003. By 2020, China is expected to have increased nuclear energy output to 6 per cent of national electricity generating capacity.

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## NEWS: INTERNATIONAL

Commonwealth may give regime chance to fulfil pledge to hand over to elected civilian government in a year

## UK warns Nigeria over summit gatecrash threat

By Michael Holman and David Wighton

Britain yesterday warned Nigeria that a government delegation planning to fly to the Commonwealth summit in Edinburgh would be barred from entering.

"Members of the Nigerian regime cannot enter the United Kingdom because of the visa restrictions imposed by the European Union in early 1996," said a Foreign Office spokesman.

It was not clear last night whether Chief Tom Ikimi, the country's foreign minister, would press ahead with his threat to gatecrash the summit by flying direct from the Nigerian capital of Abuja to Edinburgh, where the biennial heads of government meeting opens tomorrow.

In a letter to Chief Emeka Anyaoku, the Commonwealth secretary general, he

said the delegation would demand a hearing before the eight-member Commonwealth ministerial action group, which will be recommending what action to take against the regime.

The outcome of the summit, however, is likely to be as favourable as the Nigerian regime could have hoped. Its vigorous lobbying of African Commonwealth members has helped ensure it will not be expelled from the association, while Britain is reluctant to do more than continue its existing package of modest measures, which include a visa ban and an arms embargo.

The probable outcome is that Commonwealth leaders will give the military regime the chance to fulfil its pledge to hand over to an elected civilian government by October next year.

This timetable is a year

longer than the two-year grace period the Commonwealth originally set when it suspended Nigeria from membership in November 1995, following the execution of Ken Saro-Wiwa and eight other political activists.

Commonwealth officials stressed yesterday that they were determined not to let the Nigerian issue overshadow the summit.

Speaking at the opening of the Commonwealth business forum in London yesterday, Mr Tony Blair, the British prime minister, called for "a vision for a new Commonwealth".

On Monday, Commonwealth leaders are expected to sign the Edinburgh Declaration, a statement of economic principles which will back liberalisation and free trade balanced by social justice. The declaration is designed to stand alongside

the 1991 Harare Declaration on political principles.

On the environment, Mr Blair is hopeful that the Commonwealth can reach a consensus on climate change ahead of the Kyoto summit at the end of the year.

In his speech to the Commonwealth Business Forum yesterday, Mr Blair confirmed that the government planned to sell a majority stake in the Commonwealth Development Corporation (CDC). He said the government would retain "a substantial minority holding" in the development finance agency and would continue to set a framework for its operations "in order to preserve its unique character and special skills".

The privatisation, which will require legislation, could release up to £1bn of extra funds for the development budget, it emerged yes-

terday. The figure will depend largely on how the corporation's £765m of government debt is restructured. The loans could be repaid to the Department for International Development

before the CDC is floated. Alternatively, the loans could be converted into equity prior to privatisation which would release perhaps £500m from the sale of a majority stake. The market

would expect to value the company at a significant discount to the book value of its investments which was £1.3bn, excluding the government debt, at the end of 1996. Lex Comment, Page 21

Blair called for "a vision for a new Commonwealth" at a speech in London yesterday

## 'What elections? Everyone in my family is dead'

Roula Khalaf reports from Algeria as a people living with terror prepare to go to the polls

In Rais, site of Algeria's worst massacre, the idea of voting in today's local elections seems surreal. Survivors, who in August watched their families shot or hacked to death or are still paralysed by the shock. "What elections? Everyone in my family is dead, I don't even see a point in living," said 25-year old Mohammed.

After presidential and legislative elections, and a constitutional referendum that diluted the powers of the lower house of parliament, Algeria's army-backed government is calling on 16m voters to elect local and *wilaya* (department) councils. From those elected, some will make up two-thirds of Algeria's new upper house, with the rest to be picked by the president. Today's poll will complete the institutional edifice the

government is erecting to legitimise its rule, since the army stepped in to cancel an imminent election victory by the Islamic Salvation Front in 1992.

But if Algerians are greeting the elections with indifference, it is because the promises that elections would bring peace seem increasingly hollow.

In the past few months the butchery in Algeria has reached unprecedented levels. Rais, where 98 people died according to the government, and more than 200 according to survivors, was the first of three mass slayings near the outskirts of Algiers.

The story of Algeria's violence is that of people trapped between terrorists who force them to provide money and shelter and the government which punishes

them for doing so.

They face death in the most savage way, which often appears incomprehensible to westerners but is less mysterious in Algeria's historical context: the legacy of a sometimes brutal French occupation, and a war of independence in which 1m Algerians perished, some in slaughters not unlike today's; and the legacy of an authoritarian regime which followed and cemented in many Algerians a deep feeling of "hoga" - the sense of being resented, despised and marginalised by the ruling regime.

Rais is a small town on the edge of a mountain. Here, on an August night, 24-year-old Abderrazak watched his aunt shot in the head and his grandmother burned to death by a group of bearded men accompanied by some women. They broke into his house and threw in explosives. They slit the throats of those who were near and shot at those who were far. While they killed, others, including the women, looted. There were perhaps as many as 150 of them: some encircled the village while their companions killed.

Abderrazak and other survivors say they were forced to give the armed gang money a year and a half ago, but since the army moved into the area, the terrorists stopped the racketeering. Earlier this year, however, the people of Rais feared attack as the family of a member of an armed group came back to live among them.

Mounir Alish, 22, says the people who felt threatened

had asked the government for arms but were told they could not be trusted. Other survivors say not all the families agreed to taking up weapons to resist the armed groups.

Government officials, who insist the war can only be won when people turn against the terrorists, say the families attacked did not want to take up arms, that they used to help the terrorists but stopped doing so and were punished by the armed groups. They say the government, believed to have provided arms to as many as 200,000 people organised in civilian self-defence militias, cannot hand out weapons to people they suspect of having aided the armed groups.

The survivors of Rais blame the armed groups for the killing. But they also resent the authorities' failure to protect them. The Algerian army, they say, patrols the Rais region and was in Rais the night before the massacre. But during four long hours of slaughter, as people cried out for help, bombs exploded, and houses lit up in flames, no one came to their rescue.

For one survivor, the security forces' failure to respond, and the ease with which the armed groups arrive, leave, and encircle in supposed massacres only to be ambushed. They point to the army operations under way which they say are destroying terrorist bases and bomb-making facilities.

In Rais, as in other massacres, neither side will recruit the terrorists will not find recruits in the region. And the survivors have lost faith in the government and in the army's ability to shield them from terror.

## TB out of control warns WHO

By Daniel Green

Tuberculosis is virtually out of control in many places around the world, according to a three-year study published yesterday by the World Health Organisation, the US Center for Disease Control and Prevention and two other agencies.

The report, which the WHO described as "unprecedented", identified emerging "hot zones" where TB is resistant to antibiotics and "people are nearly helpless to protect themselves from drug resistant strains of the disease."

These hot zones include India, Russia, Latvia, Estonia, the Dominican Republic, Argentina and the Ivory Coast. Latvia had the highest incidence of TB which is resistant to multi-drug treatment.

In these countries, tuberculosis is "often resistant" to the commonly prescribed antibiotics, isoniazid and rifampicin.

"This makes the disease incurable for anyone who does not have access to the most sophisticated and expensive healthcare," said the World Health Organisation.

Resistance to drugs is the result of poor treatment, said the World Health Organisation, which describes the everyday methods of treatment in some parts of the world as "therapeutic anarchy".

Resistance arises when those with TB do not complete a course of antibiotics, or use too little of the drug. This can leave alive the bacteria, which then become resistant to antibiotics.

The World Health Organisation is tackling the problem with a programme to improve the way TB is treated.

The WHO urged pharmaceutical companies to develop new anti-TB drugs, to improve the effectiveness of its attempts to ensure that no bacteria survive treatment.

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The DETR is seeking a partner to develop Constructionline, its approved lists of works contractors and consultants, to its full potential. There is considerable scope for an enterprising partner to extend the client base from central government and its agencies, to encompass the wider public sector including local authorities, police and fire authorities, and NHS Trusts - a total potential market of over 3,000 clients. The Department is also keen to explore the opportunity for opening up these lists for use by the private sector in its campaign to improve quality in the building industry.

The selected partner will be required to market the services vigorously as well as provide high quality data collection, register administration - including decision on admission, database management and support to service users. The partner will need to have the full confidence of users and the construction industry, and be prepared to work in collaboration with the Department in meeting its policy aims.

Interested organisations are invited to apply to Anthony Mauds at the address below for an information pack and a pre-qualification questionnaire. The contract will be in the form of a public service concession, contract as defined for the purposes of regulation 2(1) (e) of the Public Services Contract Regulations 1993.

Requests for an information pack may be made by telephone, fax or in writing and must be received by 14 November. Completed pre-qualification questionnaires must be received by 28 November.

Please note that organisations listed on the database, or with a commercial or other interest in organisations listed on the database, will be required to demonstrate how they would avoid any possibility of conflict of interest.

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## Asians hit at Brussels fax duties

By Neil Buckley in Brussels and Michiko Nakamoto in Tokyo

Asian electronics groups yesterday reacted angrily to a European Commission decision to impose anti-dumping duties on imports of personal fax machines from Japan and six other Asian countries.

European commissioners backed a recommendation from Brussels' anti-dumping unit to impose the duties of up to 88 per cent for six months, despite the lack of a clear opinion in favour from EU member states.

Ministers must vote on whether to convert the provisional measures into definitive, five-year duties after six months and the Commission could face a battle to get the measures endorsed.

The duties stem from a complaint by Philips, the Dutch electronics group, that Japanese and other Asian manufacturers were dumping personal fax machines in the EU at below-cost prices.

A Commission investigation backed the complaint, finding dumping margins of 22-122 per cent. Imports from countries investigated had risen 72 per cent between 1994 and 1996, while sales by EU makers fell almost 15 per cent, it concluded.

Several EU states were unhappy with the Commission's analysis, especially the definition used: personal fax machines below 5kg. They

argued that as faxes became smaller and lighter, more sophisticated office machines could be caught by the duties.

Asian manufacturers said this would hinder their ability to introduce small, advanced machines into the EU, clearing the way for European manufacturers.

Brussels has tried to answer such concerns by refining the definition to fax machines using thermal paper. Officials suggested further fine-tuning was possible. But Asian producers argued they would suffer severe damage.

The European export market for these products is almost as big as our largest export market in the US. If the duties are imposed, Japanese companies will not be able to sell their machines in the EU," said Toru Matsui, vice-president, terminal equipment, at the Communications Industry Association of Japan.

Japanese makers face 34.9 per cent duties, with 58.1 per cent for China, 33.8 per cent for Korea, 39.5 per cent for Singapore, 36.6 per cent for Taiwan, 22 per cent for Thailand, and 89.8 per cent for Malaysia.

Matsushita, one of Japan's biggest manufacturers, said it would be "almost impossible to continue business as usual" in the EU. It might have to consider setting up manufacturing activities within the EU or US if the duties became definitive.

## Digital hunt for video pirates

By Alice Rawsthorn

The music industry is considering plans to create an international digital detection team based in London to comb the Internet and other digital communications networks in search of copyright abuses.

Digital piracy, whereby internet sites either sell recordings online or relay copyrighted material such as songs and video clips without the rights owner's permission, is growing problem for the world's record companies.

The situation is worst in North America, where internet penetration is highest. Last year, the Recording Industry Association of America (RIAA), which represents the US record companies, established a digital detection team at its Washington headquarters.

This summer, the RIAA took out injunctions against three pirate internet jukeboxes, from which consumers were downloading tracks free of charge. All three pirate jukeboxes immediately closed down.

Record companies are now concerned about digital

piracy spreading to other countries, as internet usage increases. The International Federation of the Phonographic Industry (IFPI), the London-based body which represents the global music business, is formulating proposals to set up a digital detection unit to crack down on online copyright abuse on a worldwide basis.

Nic Garnett, chief executive, said he planned to present proposals for the unit at next week's IFPI board meeting in Rio de Janeiro.

The planned crackdown on online piracy comes as conventional musical piracy on compact disc and cassette is rising after reaching an unprecedented \$5bn worldwide last year.

The IFPI will also discuss proposals to conduct an industry-wide analysis on how digital networks, such as the Internet and high-speed telecommunications systems, will affect the delivery of music to consumers in the future.

One option is the development of technology to allow music purchases on a transactional basis by buying the right to listen to a recording four or five times.

## Dutch sugar ruling leaves EU feeling sour

By Gordon Crabb in Amsterdam and Neil Buckley in Brussels

A group of small, dry islands in the Caribbean has thrown a spanner in the works of the European Union's decision-making machinery, embarrassed one of the EU's founder members, and set what may turn out to be an important legal precedent.

A sugar mill in Aruba has won a court injunction in The Hague banning the Dutch government from going along with a hard-won compromise agreement earlier this month over the so-called Overseas Countries and Territories - the scattered remains of British, French and Dutch overseas

colonies.

As a result, the Netherlands, having bowed to demands from the European Commission and other member states that the free flow of rice and sugar from the OCT countries into the EU should be capped, has withdrawn from honouring its decision.

So dry and small are the Dutch Antilles and Aruba that rice and sugar are not even grown in commercial export quantities.

But the EU's 1991 association agreement with the OCT, intended to stimulate their economic development by granting unlimited, tariff-free access to EU markets for agricultural products, also allowed them to process

produce imported from elsewhere in the region and ship it to Europe.

The result was an unexpected six-fold increase in rice exports from OCTs from 60,000 tonnes to almost 360,000 tonnes. The main EU producers, Italy and Spain, complained that this was destabilising the European rice market. It was also unfair since much of the rice was being grown and processed elsewhere, and with the OCT countries used merely as a transit point to gain tariff-free access.

The European Commission imposed an emergency cap of 180,000 tonnes on rice exports this year - the same limit endorsed in slightly modified form by EU ministers this month, as part of an overall "mid-term" revision of the OCT agreement.

The deal added that merely bleaching rice was insufficient to grant the commodity the status of OCT origin. It imposed a similar cap on imports of sugar of 3,000 tonnes based on the last known shipment figures, for the year to September 1996.

But Emeesa Sugar (Free Zone), which brought the complaint, began operations only this April, purchasing its raw sugar from Trinidad and Tobago and milling

nearly that much per month.

The EU's own sugar production amounts to some 15.5m tonnes, at a price of about three times that prevailing on the world market, according to a survey conducted by the Erasmus University in Rotterdam and cited by the court in its definitive ruling last Friday.

Emessa argued that the effect of the EU ruling was to restrict its ability to export both to Europe and the rest of the world market.

This matter is certainly urgent for Emessa which is threatened with considerable and irreparable damage,"

Emessa argued that the effect of the EU ruling was to restrict its ability to export both to Europe and the rest of the world market.

The ruling could also set an important precedent for other small companies which fancy challenging the supremacy of EU law.

"For a judge to interfere in a government's foreign policy, as in this case, is really quite something," remarked one European Commission official.

## Ships, glass and open skies keep US-Japan trade friction going

By Nancy Dunn in Washington

The US Federal Maritime Commission (FMC) yesterday was close to deciding whether to accept partial payment on \$4m of fines imposed on Japanese shipping companies to force Tokyo to adopt reforms in its port management system.

The maritime dispute is one of three US-Japan trade disputes under negotiation this week. Negotiators yesterday completed talks in Tokyo on flat glass, with US officials complaining that the Japanese distribution system remains closed to foreign glass producers through interlocking relationships.

Another set of negotiations, on a bilateral aviation accord, entered their third day in Washington.

The showdown over shipping remained the most fractious of the three and was precipitated when the FMC, an independent body, prepared to seize Japanese ships as they entered US ports for not paying \$4m in fines.

This alarmed the administration, which can only deter FMC action by invoking a waiver on grounds of

national security. The commission, on the other hand, argued that action was warranted as it had pursued Japanese port reform for 14 years, according to Steve Clemons of the Economic Strategy Institute.

Talks began last year produced no progress, and it was not until the ship seizure was threatened last week that Tokyo got down to serious talks, he said. Agreement was reached on Monday, but the FMC has been insisting on payment of fines due in September.

"The strong inclination of the commissioners is not to

waive the fines," said Mr Clemons. "But they will review the results [of the agreement] and decide what to do next."

Japan has said the fines violate the US-Japan Treaty of Friendship, Commerce and Navigation, and is demanding they be completely withdrawn. A compromise is likely to be partial payment of the fines, if the commission believes the deal will lead to improved port practices in Japan.

Japanese negotiators hope to conclude talks this week on a four-year interim aviation deal but are balking

over what the US calls its "safety net" - an agreement to pursue further liberalisation in four years.

Northwest is the only US airline demanding total liberalisation from the Japanese. United, American and Delta have been willing to accept less than full "open skies". Nine powerful congressional committee chairmen have endorsed Northwest's position that anything less than open skies is a "cave-in" to Tokyo.

Although Tokyo has promised US airlines extra flights, it is by no means clear that it actually has sufficient slots to offer to make the flights possible.

One official also said the two sides were still far apart on the amount of flights per week to be increased for the four-year period for US carriers with limited rights under the existing bilateral treaty - American, Continental and Delta airlines.

US officials yesterday said Japan was lagging in opening its \$5bn flat glass market to foreign companies, but Japan insisted it was abiding by a 1995 agreement on the issue. A US industry official said an improvement in sales had proved short-lived.

## Steel makers face shake-up

By Andrew Bolger, Employment Correspondent

The world steel industry faces further changes in the size and skills of its 7m workforce because of technological change, environmental pressures and withdrawal of state ownership, according to the International Labour Office.

An ILO report says the biggest job losses have occurred in Europe. "In the European Union, the total number of steel jobs dropped by more than 65 per cent (from 931,000 to 326,000) between 1975-95.

In France and the UK, steel employment fell 75 per cent and 50 per cent respectively, while production fell by 16 per cent and 14 per cent. "In the US and Japan, 51 per cent and 48 per cent of steel jobs were lost, against

falls in production of, respectively, 10 and 1 per cent."

Workforce reductions have also affected countries of the former USSR. In the Russian Federation, 10 per cent of steel jobs have been lost in the past five years. But "this may just be the start".

The federation's ministry of industry says some 310,000 jobs will have to be shed over the next five years to keep Russian steel competitive. This represents more than 40 per cent of the 705,000 steel jobs existing last year.

"The huge social costs of increased competitiveness of those that have been paid in western Europe still have to be quantified and funded" in much of Eastern Europe and the former USSR, it adds.

A new generation of computer-controlled "mini-mills" employing far fewer workers

had proved much more competitive than the huge integrated steel mills that were the norm in the past.

"British Steel's Trico mini-mill in the US has a workforce of less than 600 producing 2m tonnes of steel a year; in the UK 4,000 workers directly involved in steel-making produce 3m-4m tonnes over the same period."

Consumption in industrialised countries is expected to remain static or decrease slightly in the coming decade, but the report predicts strong growth in Asia, notably China, and Latin America.

With nearly 3.2m steel workers, China has the largest workforce. China, the Commonwealth of independent States and India together account for about 70 per cent of the industry's

total labour force, but only 30 per cent of steel output.

The ILO report will be discussed next week in Geneva at a meeting of employers, unions and delegations from 18 countries.

Source: ILO

1975 1995

Country

Australia 35 12

Belgium 81 23

Brazil 124 80

France 157 39

Germany 227 36

Hungary 64 14

Italy 200 280

Japan 98 39

Poland 156 92

Spain 91 24

Russia 638 705

South Africa 108 80

UK 191 37

US 370 237

Source: ILO

1995 1995

Country

Australia 35 12

Belgium 81 23

Brazil 124 80

France 157 39

Germany 227 36

Hungary 64 14

Italy 200 280

Japan 98 39

Poland 156 92

Spain 91 24

Russia 638 705

South Africa 108 80

UK 191 37

US 370 237

Source: ILO

1995 1995

Country

Australia 35 12

Belgium 81 23

Brazil 124 80

France 157 39

Germany 227 36

Hungary 64 14

Italy 200 280

Japan 98 39

Poland 156 92

Spain 91 24

Russia 638 705

South Africa 108 80

UK 191 37

US 370 237

Source: ILO

1995 1995

## NEWS: THE AMERICAS

# US may spend \$1bn to fend off cyber attacks

By Nicholas Denton  
in San Francisco

The US is considering a \$1bn-a-year programme to defend information networks after a presidential commission warned of emerging "cyber threats" from computer hackers and hostile powers.

The plan is designed to guard against attacks such as the recent flood of electronic mail messages originating in Estonia and Australia which caused serious problems for computers at

Langley Air Force Base and other government sites.

"While America's infrastructure is robust and resilient, the president believes it is important to act now to ensure that America's economic prosperity and national security is protected against any potential future threat," the White House said yesterday.

The initiative comes in response to a report by the year-old commission which found that break-ins to vital computer systems could present as much

of a threat as traditional terrorist tactics.

In a summary of the report released yesterday, the commission said: "Today, the right command sent over a network to a power generating station's control computer could be just as effective as a backpack full of explosives, and the perpetrator would be harder to identify and apprehend."

"The rapid growth of a computer-literate population ensures that increasing millions of people possess the skills necessary to consider such an attack."

The US, which spends an estimated \$250m on information security and other infrastructure assurance, should double the programme and make further 20 per cent annual increases for the next five years, according to the commission.

The commission came under immediate attack from privacy advocates concerned the report may give cover for employers to bring in lie detector tests for employees involved in information security.

Most computer hacking is relatively harmless, conducted by hobbyists motivated by a desire not to bring down vital systems but simply to demonstrate their technical virtuosity.

And their infiltration of important computer networks is usually possible, not because the networks are inherently vulnerable, but because systems administrators or users have left passwords in locations easily accessed by outsiders.

In 1994, a UK hacker gained access to Rome Laboratory in New York and used it as a base for attacks on US military sites. The commission said another break-in had damaged the computer system which manages emergency calls in the US.

for attacks on US military sites. The commission said another break-in had damaged the computer system which manages emergency calls in the US.

The commission forecast that hacking would evolve from a nuisance into a means by which terrorists or hostile nations could conduct "information war" against the US. "Somebody with serious intent to do harm is bound to arise in the future," said Robert Marsh, the retired general who headed the commission. "It is clear that there is hardly any nation today that would seek to defeat the US on the battlefield."

## EU to probe Boeing deal with Delta

By Michael Skapinker,  
Aerospace Correspondent

Karel Van Miert, the European Union competition commissioner, yesterday ordered an inquiry after Delta Air Lines of the US said it had appointed Boeing its exclusive aircraft supplier for 20 years.

Boeing this summer agreed to drop the exclusivity clauses from three supply agreements with US airlines. This was one of the conditions Mr Van Miert had imposed in return for EU approval of Boeing's takeover of McDonnell Douglas, also of the US.

But Delta said yesterday it had signed a final agreement to buy up to 644 aircraft from Boeing in the next 20 years. Delta has placed firm orders for 106 Boeing aircraft, with a list price of \$6.7bn. It has taken options on 538 more aircraft. Delta said the agreement provided that Boeing would be its sole supplier of new aircraft in that time.

However, in deference to the European Commission, Delta said Boeing would not enforce the exclusivity provision unless Brussels permitted it to do so. It also said that the 20-year agreement was subject to certain exceptions. This is understood to mean that Delta can buy aircraft from other suppliers if Boeing does not manufacture a suitable model.

This implies that if Airbus Industrie proceeds with plans to build a 550-seat aircraft and Boeing does not, Delta can buy the large aircraft from the European consortium. However, this exception was part of the original exclusive agreement to which Mr Van Miert objected and Delta does not, at present, have plans to purchase 550-seat aircraft.

The Commission would examine the Delta-Boeing contract to see whether the exclusivity clauses remained.

Companies are slowly embracing a campaign to get people into jobs

## US works to cut welfare lists

Corporate America is only slowly embracing President Bill Clinton's welfare reforms. But one year after the president signed the programme into law, there are now some encouraging signs.

By the beginning of this month, most states had met the requirement that they have at least 25 per cent of their welfare recipients in jobs or some kind of training — a target set as part of the new law. In the first year, welfare rolls shrank by around 1.4m people nationally — a small achievement.

But less than half the states met a tougher goal requiring that there should be workforce participation by at least 75 per cent of all two-parent households receiving aid.

Behind these numbers lies a varied and sometimes tentative response from much of the corporate sector, which will ultimately have to provide many of the jobs if the US's 4m welfare recipients are to move into the labour force on a permanent basis.

A recent Coopers & Lybrand survey of nearly 450 chief executives at the country's fastest growing companies shows an impressive 60 per cent thought they would be interested in partnering other businesses to help welfare recipients find formal receiving aid.

But only 26 per cent had actually taken steps in this direction.

Another study suggested that even supportive executives were wary of welfare recipients' attitudes to workplace demands.

The main organisation seeking to drive up those numbers is the Welfare to Work Partnership, an independent Washington-based organisation founded earlier this year.

Eli Segal, its president, is optimistic about the partnership's goals, but realistic about the sales job ahead.

The partnership, he says, recognises that hiring welfare recipients will have to be a "smart solution for business" if it is to succeed. It will probably also have to capitalise on the tight labour markets which at present exist across much of the US,

driving unemployment rates to as little as 2 per cent in some areas.

"This is a dash, not a marathon," he says.

To date, the partnership can point to over 2,100 companies which have expressly signed up to its goals — that is, the hiring of former welfare recipients without displacing existing workers.

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## NEWS: UK

Death of Diana, Princess of Wales, contributes to largest decline since 1991

## Big fall in retail spending

By Robert Chote  
in London

Spending in the UK's shops recorded its biggest one-month fall for six and a half years in September, as the death of Diana, Princess of Wales, disrupted the nation's shopping habits.

Retail sales volumes fell by a seasonally adjusted 1.9 per cent last month, according to the Office for National Statistics. This was the biggest decline since April 1991 and much bigger than City economists had expected.

The figures are unlikely to be of much use to the Bank of England, the UK central bank, when it contemplates whether to raise interest

rates again next month. In addition to the "Diana effect", spending patterns were distorted by unseasonably warm weather and an end to windfall payments from savings and loans institutions which have demutualised.

Individual retailers reported declines in sales of anything up to 20 per cent following the Princess's death. Many shops were shut on the Saturday of her funeral and trade was also depressed in the week before. The statisticians said there were signs of increased spending in florists, book shops and record shops, but not enough to affect the total.

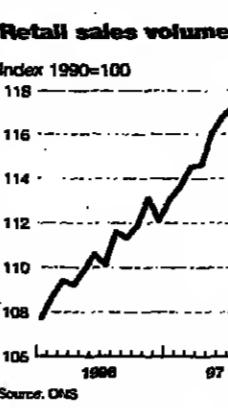
Sales volumes fell in all categories of retailing during September, with the exception of "non-store retailing and repair", dominated by mail order.

Food sales fell by 0.9 per cent in September, but from an unusually high level in the previous month. Household goods sales fell by 5.7 per cent, but this category had been inflated over the previous three months by an estimated £400m (£6.8m) in spending from demutualisation windfalls.

Clothing and footwear sales also showed a sharp decline, with a drop of 2.7 per cent between August and September. The statisticians said sales of new winter lines got off to a slow start because of unusually warm weather.

These special factors make it impossible to extract a reliable indication of the underlying trend. The big fall, which will presumably be wholly or partly reversed next month, will also distort the three-month or three-month comparison which is usually used to indicate the long-term trend.

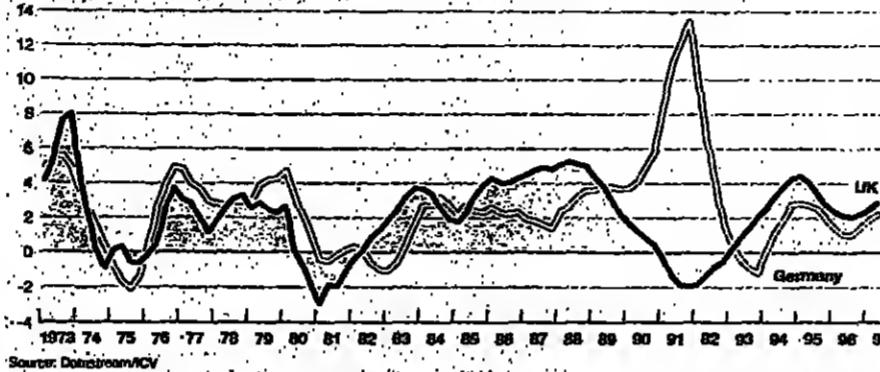
"You have got to disregard this report," said Mr Claran Barr, economist at Deutsche Morgan Grenfell. "It was totally distorted and so will October be as we get a catch-up effect." But John O'Sullivan, at NatWest Markets, said it would be wrong



to shrug off the entire decline as the result of exceptional factors. The European Commission has reported falling consumer confidence in the UK in recent months, which would normally be associated with weaker spending in shops.

### Phasing problems: how UK and Germany compare

Real GDP (annual % change in four quarter moving average)



**Britain's economy is likely to be out of step with its EU partners for the foreseeable future**

Come 2002, business cycles are still likely to be out of step, except that the relative positions could be reversed. At present, the economies of the continental EU countries are at the beginning of a strong upswing, as shown by the European Commission's forecast of annual growth.

In the UK, by contrast, economic growth is forecast to fall. The National Institute of Social and Economic

Research, an independent think-tank, says there is a 25 per cent chance of a recession next year. Other forecasters are looking towards a "soft landing". Either way, by 2002 UK economic growth and interest rates could well be lower than today. UK interest rates could also be below EU rates, which are expected to rise in the next few years.

If the UK were to enter in 2002, the government would risk an unpopular rise in mortgage rates, linked directly to Emu. Even if the government could overcome this political problem, going into Emu at a low point could prolong an existing downturn.

This means that the UK might have to wait for the next economic upturn which might not come until later in the next decade. If

Wolfgang Münchau

Editorial Comment, Page 15

## Politics and economics in Emu standoff

**P**olitics may preclude the UK's participation in European economic and monetary union before the next election, but economics may make it impossible for Britain to join later.

Gordon Brown, the UK chancellor, has set a number of conditions for entry, including a closer alignment of business cycles between the UK and the rest of the EU. However, this may be a forlorn hope: the latest economic forecasts suggest that the misalignment in the cycles, bad as it may be today, could get even worse.

The European Commission said last week that the UK will have the slowest annual growth rate of all EU countries next year - just 2.1 per cent, compared with 3.3 per cent this year. This follows a period during which the UK was one of the fastest-growing EU countries. UK growth tends to be either above or below the EU average, but rarely around the average for sustained periods.

And there is a political consideration peculiar to the UK: the popularity of vari-

able-rate mortgages. Thus the effect of changes to short-term interest rates are quickly passed on to homeowners - and voters.

This imposes a critical constraint: the UK will not be able to join Emu if interest rates for the euro, the new single currency, are significantly out of line with the UK. It was a similar tension that preceded the UK's ejection from the exchange rate mechanism in 1992.

Short-term interest rates in the core Emu group are now at 3.3 per cent, compared with 7 per cent in the UK. If the UK were to join the first wave, rates would have to fall sharply, which could create problems such as a threat to UK competitiveness and rising inflation.

Eddie George, governor of the Bank of England, has pointed out the risks of forcing diverse economies together: "The one-size-fits-all interest rate could result in economic weakness and unemployment in some areas if the European Central Bank pursued a firm monetary policy."

The DTI and computer software group Sage carried out the study for Taskforce 2000, an organisation set up to promote awareness of the problem that will arise as systems are unable to distinguish between 1999 and 2000 at the turn of the century.

Barbara Roche, minister for small companies, warned that time was running out.

"There is still a considerable amount to be done and they must not leave it any longer," she said.

Although 97 per cent of the companies canvassed claimed to understand the business implications of the bomb, about 15 per cent have done nothing to modify their software and 45 per cent have not even examined their systems to check for year 2000 compliance.

Almost three-quarters of the companies said their customers were not insisting on year 2000 compliance, while just over half were not insisting their own suppliers proved their compliance.

The bomb is the consequence of software programming which denotes a year with two digits rather than four - "97" rather than "1997", for example. The technique means computers cannot distinguish between centuries, with unpredict-

able results. Mr Graham Wylie, managing director of Sage in the UK, said the issue had been portrayed as a problem for big corporations with large mainframe computers running elderly software.

"With more than 90 per cent of UK businesses falling into the small and medium-sized bracket, it is clear that someone needs to lead the way on the year 2000 issue for these companies," said Mr Wylie.

## Small firms ignoring computer 'bomb'

By Alan Cane in London

Most small and medium-sized UK companies have computer systems that are susceptible to the "millennium bomb" but few have taken steps to remedy the problem.

Unless they start work immediately on modifying their systems they could suffer serious disruption after January 1, 2000, according to a department of trade and industry study.

The government has recently allocated £1m (£1.6m) to Action 2000, an organisation created to help companies come to terms with the issue.

Although 97 per cent of the companies canvassed claimed to understand the business implications of the bomb, about 15 per cent have done nothing to modify their software and 45 per cent have not even examined their systems to check for year 2000 compliance.

## MPs set to probe claims of investment poaching

By Alan Pike  
in London

Claims that UK regions are poaching inward investment activities from each other are set to be investigated by a House of Commons committee.

The probe is likely to bring to the open growing indications of friction between Scotland, Wales and the English regions.

A proposal to investigate the issue will be put to trade and industry committee members when they meet on Wednesday to determine their programme of work for the coming parliamentary session.

Although the final decision will be for the full committee, the inward investment probe has the support of senior members and is likely to go ahead.

The committee's inquiry is likely to be confined to a single meeting next month. As well as taking evidence from economic development and inward investment organisations, a minister would probably be asked to give evidence.

Margaret Beckett, chief trade and industry minister, has been asked by Tony Blair, the prime minister, to resolve the issue. Discussions between English, Scottish and Welsh industry ministers are currently seeking a basis for a "concordat" to avoid public money being spent on wasteful inter-regional competition and ensure that financial assistance in all parts of the country remains within common guidelines.

The subject is, however, provoking considerable sensitivity.

Brian Wilson, the Scottish industry minister, stressed last week that Locate in Scotland, the inward investment organisation, would "retain its powers and continue its excellent work". He said it operated under a set of rules agreed by all UK industry departments, and "any updating of these procedures will only be in Scotland's interests".

The timing of the committee's investigation could prove particularly sensitive. A public airing of the issue next month would coincide with the publication of the government's policy paper on the English regions. That will set out the proposals for establishing nine regional development agencies from April 1999.

It is expected that the English RDAs will give the more formally organised Scottish and Welsh inward investment operations a much tougher run for their money.

## UK NEWS DIGEST

### Image 'impedes design exports'

Outdated images of the UK may be an obstacle to the export ambitions of British designers, according to two surveys published today to mark the launch of Design in Business Week. One shows that UK designers rate their work more highly than their customers in other countries do. The other suggests they have failed to convey the improvements in the quality of British design to customers mesmerised by the country's traditional image.

"Tartan, tweeds and whisky are not always the best background for promoting leading-edge product design," said David Rivett, chairman of the Design Business Association.

The two surveys were commissioned by the Design Council, the government-backed body which promotes design in British life. The first survey, carried out by IDEO Europe, a design consultancy, shows that international managers with responsibility for purchasing design ranked the UK sixth out of nine countries. It fell behind Italy, Germany, the US, Japan and France.

The second survey, by the Design in Business Association, shows British companies are facing difficulties in exporting design services such as corporate identity and branding.

John Willman

### CONSERVATIVE PARTY Local government revival urged

The opposition Conservatives yesterday pledged to become "the party of local government", setting themselves the target of a two-fold increase in local authority representation in the next five years. The move represents a significant break with the past. During its 18 years in office, which ended in May, the party put emphasis on reducing the power of local government. Archie Norman, party vice-chairman, said at the end of the party's two-day strategy meeting in the south coast town of Eastbourne: "We are on the verge of a sea-change in Tory thinking towards local government."

Local elections will be contested in all English metropolitan districts in May 1999, with nationwide local ballots due a year later. "We have set ourselves ambitious local election targets," said a party official. "The upcoming contest is the first crucial staging post on our road to recovery."

Liam Halligan

### TEXTILES

#### Jobs to go at Pringle factories

Pringle, one of Scotland's best known knitwear producers, is to make nearly 300 people redundant because of reduced orders as a result of the strong pound. The company, the flagship brand of Dawson International, the Scottish textile group, said the strength of sterling was having a serious effect on orders in Germany, east Asia and Japan. Exports account for 60 per cent of total sales. Most of Pringle's employees are at Hawick on the border with England and at Berwick-upon-Tweed in north-east England.

James Buxton

### VIDEO GAMES

#### Nintendo slashes price by \$81

Nintendo has stepped up the pressure in this year's battle for the Christmas video games market by slashing the retail price of its Nintendo 64 games system by £50 (\$81) to £99.99. The price cut, which takes effect tomorrow, comes a fortnight after news that the rival Sony PlayStation will bold its price to £129.99 this Christmas, but will be sold with a free joystick and memory card worth about £34.

This level of price promotion has become a critical weapon in the fierce competition between Japan's video games groups.

Alice Rawsthorn

### CARE OF ELDERLY

#### Authority abandons costs battle

The north-west England local authority of Sefton yesterday abandoned its legal fight over elderly care costs as Frank Dobson, the chief health minister, said that more than £40m (£64m) of the extra £239m being provided for the state health service in England this year will be diverted to social services departments. A scathing report from a public spending watchdog has called for more co-operation to relieve the need for acute hospital admissions and to rehabilitate patients at home after hospital treatment. Mr Dobson has written to the heads of all hospital authorities and social services departments outlining how the extra funds should be spent.

Simon Buckley

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## NEWS: UK

Four Strasbourg MEPs suspended as prime minister Blair is jeered on visit to London futures exchange

## Government hit by further problems on Europe

By John Kampfner  
In London

Government difficulties over Europe intensified yesterday when four Labour members of the European parliament were suspended and Tony Blair, the prime minister, was booted on a visit to the London International Financial Futures Exchange.

Mr Blair's visit to the City was marred by heckling from traders following the fall in stocks on Monday, caused by confusion over

policy towards European monetary union.

A Liffe official described the boos as "ironic". He said traders were joking and that Mr Blair, who was accompanied by three Commonwealth heads of government, had received a "very warm reception".

The prime minister's office dismissed a Reuters report on the event as "unbalanced" and said the reception was "overwhelmingly warm". Observers on the floor said the boos and cries of

"sell" appeared to be light-hearted.

Gordon Brown, the chancellor of the exchequer, has said he will make a statement to the House of Commons, after it returns next week, setting out the government's position in an attempt to allay concern in the City and elsewhere.

The four leftwing MEPs were suspended for refusing to toe the party line in a move that could lead to confrontation with the European parliament.

José María Gil-Robles, the parliament's president, agreed to ask its rules committee to investigate whether the move violated the privileges of MEPs. Procedures stipulate that MEPs "shall not be bound by any instructions and shall not receive a binding mandate".

The rebels were given until mid-afternoon yesterday to accept an ultimatum preventing them from criticising government policy, notably the decision to hold the UK's next European elections under proportional representation.

Leftwingers predict that Mr Blair will use the new system to weed out recalcitrant MEPs who have defied the official line. The leadership has long wanted to bring MEPs under the same tight control now imposed on UK Labour MPs.

The four - Ken Coates, Hugh Kerr, Alex Falconer and Michael Hindley - were told they were no longer welcome at meetings of the 62-strong Labour group in the

European parliament, the largest of any country. Wayne David, the leader of the Labour group who carried out the suspensions, said:

"This is not something that we like doing but we think it very important that Labour MEPs, like everyone else in the Labour party, accepts collective decisions and procedures." Labour's latest code of conduct prevents members from public discussion of "any aspect of the party selection procedures" which are a matter for internal discussion.

## Ministers draw back on cuts to Oxbridge

By Simon Tappert and John Kampfner in London

The government is drawing back from plans to abolish the special financial privileges of Oxford and Cambridge universities after a rearguard action by academic officials.

Ministers last month suggested they wanted to scrap £35m (\$57m) extra funding which pays for the universities' elite college and one-to-one tutorial systems. This gives each Oxbridge student £2,000 more than students at other UK universities.

Higher education faces a £2bn funding shortfall by 2000-2001, and the government is reviewing ways to re-direct funds to the most cash-starved institutions.

A senior government official said: "The universities have said some positive things on access in recent days which is just the sort of thing which ministers have been looking for for some time."

Cambridge University this week unveiled plans to increase the proportion of state school pupils from 33 per cent to 38 per cent, and reduce the proportion of fee-paying independent school pupils to 32 per cent.

The Financial Times reported in September that the government wanted to phase out the funding. A minister said at the time that "with the entire sector facing a squeeze, it's becoming increasingly difficult to defend a system which gives extra money to the rich".

But the colleges have been engaged in intense lobbying, and a senior government official said ministers "are listening to what the colleges are saying".

Heads of Oxbridge colleges have warned ministers that a funding cut would force them to become "smaller, private institutions". Some threatened to close graduate programmes, undermining their international reputations.

## Government to push for wave and wind power

By Lewis Boultton  
In London

The government is to reject pleas from the solar power industry for millions of pounds in subsidies and push instead for an increase in wave and offshore wind power, Michael Meacher, the environment minister, said yesterday.

Mr Meacher said that public spending constraints in the near future ruled out a big increase in subsidies for solar energy. Manufacturers of solar equipment have sought £15m (\$29m) annual support in return for which they have pledged to invest £100m in manufacturing capacity.

Mr Meacher said that solar power was still "too expen-

sive" in relation to wind power and would come into its own only in five or 10 years' time. His comments directly contradict a call he made before the general election in May for early support for solar power. They appear to foreshadow the result of a government review of renewable energy policy to be published early next year.

Mr Meacher's comments, which dismayed Greenpeace and other solar industry lobbyists, coincided with a big push yesterday by the government to encourage more companies to embrace combined heat and power.

This is an extremely efficient method of electricity generation that produces heat and enables companies which install it to sell sur-

plus electricity. Along with support for renewables and changes in transport policy, CHP is one of three pillars of the government's emerging strategy for achieving a 20 per cent cut in emissions of carbon dioxide, associated with climate change.

Richard Morse, head of electricity at Dresdner Kleinwort Benson, the investment bank, told a seminar of industrialists organised by the government that CHP made financial sense for many companies.

Mr Morse said that every 1000MW of CHP plant installed could reduce carbon emissions by 1m tonnes and cut energy costs by more than £100m per year.



PA  
Alan Sugar (left), founder of the Amstrad computer group, returned to his school yesterday to talk to students. He was accompanied by Gordon Brown, chancellor of the exchequer, as part of a government-backed tour promoting enterprise

## Unit trust industry queries regulator's competence

By Jonathan Guthrie in London

The Association of Unit Trusts and Investment Funds, which represents the £140bn unit trust industry, has raised "considerable concerns" about the competence of some staff expected to oversee the sale of financial products to the public within the planned super regulator, Newro.

The comments, made by Autif director-general Philip Warland in an interview with the FT, come at

an embarrassing time for the main City regulator, the Securities and Investments Board. Next Tuesday it will formally launch Newro, which is set to replace both itself and eight other regulatory bodies.

The bulk of sales of financial products to the British public is monitored by some 126 staff employed by the Personal Investment Authority, the retail regulator. Most are expected to continue in the same role as employees of

Newro when it begins its operations in the spring.

But according to Mr Warland, most of them joined the PIA from life insurers, which meant they understood insurance policies but were not, in his opinion, as well qualified to deal with some other types of investments.

This was inadequate, he said, because non-insurance investment products, like unit trusts, make up half the sales of many intermediaries regulated by the PIA.

In contrast, he added, the staff of two other regulators - the Investment Management Regulatory Organisation and the Securities and Futures Authority - "understand investment and have a better idea that the business is not wholly transaction driven."

Imra and SFA employees monitor a much smaller proportion of retail sales than the PIA and are, thus, likely to be thinly represented within the proposed supervisory division of Newro.

Richard Cockcroft, head of market practice and training and competence at the PIA said: "Our staff participate in wide-ranging, continuous training and many of them are highly qualified. I suspect these criticisms are based on just a few unsatisfactory experiences."

But according to Paul Kafka, a spokesman for Fidelity Investments, one of the UK's biggest retail fund managers, Mr Warland "is definitely articulating the view of the unit trust industry." Mr Kafka said that PIA monitoring staff "need to be managed carefully within Newro."

Briget Cleverley, marketing director of Schroders, the UK's biggest unit trust company, said some PIA staff had in the past lacked "a technical grasp of investment products." She suggested special training but went on to add: "I do not agree with blanket criticism of these officials."

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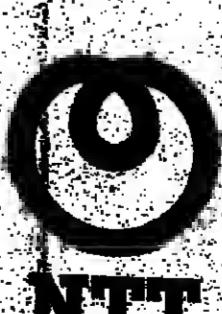


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DAY OCTOBER 23 1997

FINANCIAL TIMES THURSDAY OCTOBER 23 1997 \*

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WHO

By Daniel Green

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young economists

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No FT, no comment.

## TECHNOLOGY

A new music CD format supplies textual information, writes George Cole

# Listen with your eyes

**M**usic CDs that you can read as well as listen to will be in the shops from next year. CD Text is a new format that adds text information to a conventional audio CD. The system is no relation to the various recordable compact discs becoming available.

CD Text is an extension to the existing audio CD format, developed by Philips and Sony in the 1980s. It will allow a new generation of CD players to display text, which could include the track title, album title and artist's name.

The idea of adding extra information to music CDs is not new.

### The new format is fully compatible with the 500m audio CD players worldwide

written into the original CD specification is a system known as CD Plus Graphics (CD+G), which puts teletext-type graphics and text on a television screen. But CD+G failed to take off, except in Japan, where it is used for

karaoke, as it involves singing along to the backing track of a song while reading the lyrics on a television screen.

But CD Text is different, says Mike Masdrovianis, Philips audio products strategy manager: "It costs little to add text to a CD, about \$10,000 (£6,200) in production costs. What's more, the discs can be produced on existing CD lines, and it costs the CD manufacturer only about \$1,500 to add a CD Text encoder to its existing equipment."

The text data is stored on an area of the disc that holds extra information known as sub-code data. On today's music CDs, very little sub-code data is used – it is devoted mainly to showing time and track information.

CD Text is fully compatible with the 500m audio CD players worldwide, which will ignore the text and play the music as normal. In spring 1998, a number of manufacturers will be launching a new generation of CD Text-compatible players, including Sony, Philips, Denon, Aiwa and Kenwood.

The new players will have built-in text decoders and LCD screens that are larger than those found on today's CD players. PolyGram and Sony Music

will be launching CD Text titles.

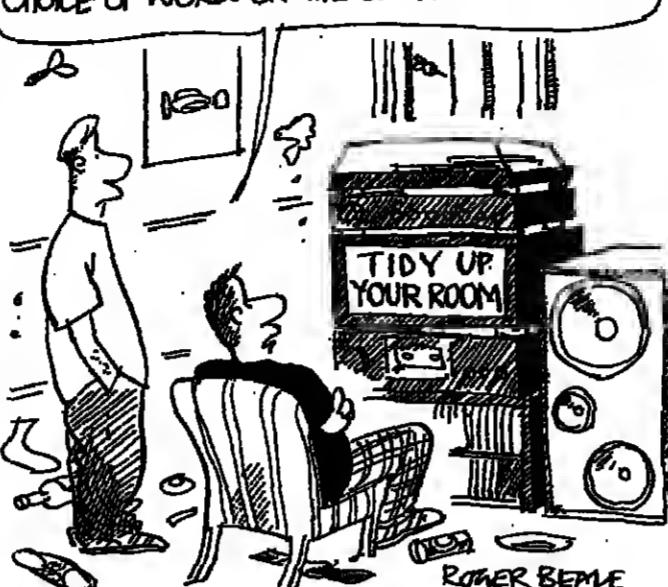
Some CD Text players will have simple eight-character displays, with a scrolling facility, while others will have multiple-line displays for showing more information. The new CD players may even have video output sockets, allowing the text information to be displayed on a television screen or computer monitor. The CD Text format offers optional features, including the ability to display scrolling lyrics and a system for highlighting part of a track – known as highlight scan. Many CD players already offer a scanning facility, which allows the user to hear the first 10 or 20 seconds of a track, before the player moves on to the next track to repeat the process.

However, highlight scan makes it possible for a CD producer to electronically mark any portion of the song for playback, such as the chorus.

Supporters of CD Text say the feature will be especially useful for owners of multi-disc CD players, some of which can store more than 100 discs. The text information will make it easier to find a specific track or disc. Record stores could also use CD Text to tell customers the artist name and the track title being played in the shop. CD Text data can also be broadcast by radio and received by car radio tuners with a text facility.

Mr Masdrovianis admits that the introduction of CD Text has been driven by the hardware companies: "The compact disc market is a mature one, and this is just one way of making it even more attractive to consumers," he says.

ROGER BEMPTON



# The Force is with us

### William Macdonald on water with a catalytic effect

invisible to the naked eye.

Water is a polar molecule; that is, one end of the molecule has a slight positive charge while the other has a slight negative charge. The formation of the IE Crystal exploits this effect. The water molecules form alternating negative and positive layers around a positively charged ion – an effect which has been termed "nanotricity". This gives the water a pseudo-crystalline or solid structure, even at room temperature.

The result is a unique substance which, once formed, is surprisingly stable and can even be filtered, packaged and sold. It is being marketed as The Force in the US, where it is used to

boost car engine performance by decoking the engine. The IE Crystal has a catalytic effect which encourages a "more complete burn" of the fuel.

The same principle applies to its use in the furnaces of steam crackers, which are used to produce olefins such as ethylene and propylene. "It looks pretty much like regular water," says Grant Shields, vice-president of technology of KTI, a subsidiary of Mannesmann in Germany.

KTI's core business is the design and construction of process plants and hydrocarbon steam cracking facilities. It recently signed a joint research and development agreement with ATG over the IE Crystal

technology. "The decoking of cracker furnaces is a pretty active area of research, with people looking at techniques such as the injection of chemicals to inhibit coking," he says.

An ethylene cracker can be run for one to two months before it must be taken down, and two to three days spent decoking the furnaces. A study, carried out by Selim Senkan, a professor of chemical engineering at the University of California in Los Angeles, has found that the IE Crystal can reduce the build-up of coke by a factor of four.

"Once we get the data and have had a chance to look at it we will then start looking at the economics of the technology and start talking to operators," says Mr Shields. KTI could offer the process commercially within six to 12 months.



Transmission electron microscope photographs of IE crystals

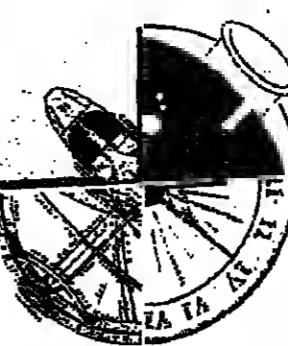
### European Union research and technology grants

Programme	Date/OJ Reference	Due date	Value Ecu m	DG	Contact fax/Email
Information Technology (ESPRIT)	15.4.97/C117 (with Brite-EuRam) 16.9.97/C280	31.3.98 16.10.97, 16.12.97 6.2.98	2,035	III	Mrs Gerda Colling <32-2-296.83.86 esprit@dg3.ecb.be
		17.3.98			
Software, components & sub-systems; multimedia; long-term Research; Open Microprocessor System Initiative; high-performance computing; business process technologies; manufacturing integration					
Industrial & Materials Technologies (Brite-EuRam)	15.12.95/C337 17.12.95/C381 networks, CRAFT etc	20.5.98 17.12.97, 14.4.98 20.5.98	1,722	III	Help Line <32-2-295.80.46 imt.helpdesk@dg12.ecb.be
	15.4.97/C117 (with Esprit)	31.3.98			
Production technologies; materials & technologies for product innovation; technologies for transport					
Standards Measurements and Testing (SMT)	15.12.94/C357 15.8.95/C148 17.5.97/C183	15.3.98-17.12.97 80.7.98 27.11.97	194	IV	Mr Pierre Mériguet <32-2-295.80.72 smt-helpdesk@dg12.ecb.be
Measurements for Quality European Products; standards and technical support to trade; measurements related to the needs of society					
Environment and Climate	15.12.95/C337 16.9.97/C280	20.3.98-20.6.98 16.12.97, 15.3.98	6665	IV	Space technology: <32-2-296.05.88 Other areas: <32-2-296.30.24 environment-infodesk@dg12.ecb.be
Environmental quality & global change; environmental technology; space techniques for environmental monitoring & research; sustainable development					
Marine Science and Technology (MAST)	15.12.94/C357 15.8.95/C75 17.5.97/C183	17.12.97/MSM@ecb 12.6.98 12.6.98	243	IV	Mr Jean Bézonne <32-2-295.30.24 mst-infodesk@dg12.ecb.be
Marine biology; strategic marine research technology					
Biotechnology	15.12.95/C337 15.6.96/C171 17.12.95/C381 17.5.97/C183	7.1.97, 3.98 8.7.98 (training) 3.8.98 & 9.98 (workshops) 15.10.97 (PTD project)	588	IV	Mr Stéphane Hogan <32-2-295.29.65 life-biotech@dg12.ecb.be
Cell biology; genome analysis; cell communications in neurosciences; immunology and virology; structural biology; biodiversity; social acceptance					
Bio-medicine and Health	17.1.95/C12	91.3.98-31.12.97 (fellowships)	358	IV	Mr Alain Vanvoe <32-2-295.53.85 alain.van.vosse@dg12.ecb.be
Pharmaceuticals; biomedical technology & engineering; brain research; human genome research; public health; biomedical ethics					
Agriculture and Fisheries (FAIR)	17.12.95/C381 ■ SME/Craft ■ fellowships	8.4.98 CONTINUOUS 15.10.97	8483	IV	Mr Xavier Goenaga <32-2-295.43.22
Integrated production & processing chains; nutritious foods; agriculture; forestry & rural development; fisheries & aquaculture					
Nano-technologies (NUTECHNE)	15.12.94/C357 15.6.96/C171 15.9.97/C280	17.12.97 (Demol) 9.6.98-7.8.98 (training) 30.01.99 (Demol)	1,030	IV	Mr Michel Poitevin (R&D); <32-2-295.06.56 Mr Wlodek Folwarczny (Demol); <32-2-295.05.77; info@dg17.ecb.be
Strategy; rational energy use; renewable sources; fossil fuels; energy; technology dissemination					
Marine Research Policy	17.1.95/C12	1.1.97	170.5	IV	Radiation protection: <32-2-296.62.59 All other areas: <32-2-295.39.91 radiation-protection@dg17.ecb.be
Innovative approaches; reactor safety & severe accidents; radioactive waste management disposal & decommissioning; impact on man & environment					
Targeted Socio-Economic Research (TSER)	16.9.97/C280	15.1.98	112	IV	Mr Peter Peck <32-2-295.21.37 socio-research@dg12.ecb.be
Evaluation of science & technology policy options; education & training; social integration & exclusion					
International Cooperation	15.2.95/C38	9.6.98-9.98	675	IV	Can/East, Europe Mr R. Meller <32-2-296.33.08 Non-EU, Indust. Mr. B. Ballein <32-2-295.33.08 EEA, EURATOM Mr. N. Newman <32-2-295.33.08 COST Mr. Pierre Venet <32-2-295.42.08 Developing countries <32-2-295.22.08 Inco-ds@dg12.ecb.be
Industrial & Economic Policy; other industrialised countries; developing countries					
Dissemination and application of research findings INNOVATION	16.9.97/C280	15.12.97	312	IV	Innovation: Mr. Robin Milne <32-2-295.94.54 R&D Centres: Mr. J. Hamond: <32-2-295.44.22 Technology Dissemination: Mr. M. Ballein <32-2-295.33.08 Technology Transfer: Mr. J. H. Dally <32-2-295.44.22
Technology validation; Technology transfer					
Training & Mobility of researchers (TMR)	16.9.97/C280 15.12.97	15.12.97 31.3.98	792	IV	Mr. Jürgen Rosenbaum <32-2-295.00.26 mobility@dg12.ecb.be
Research networks; access to large-scale facilities; training through research; conference & summer schools					
ACTS, TRANSPORT and TELEMATICS APPLICATIONS					
have no open calls					

The table above shows the status of the main programmes that distribute R&D grants within the EU Fourth Framework Programme. The name of each programme (and acronym, if any) is on the left in bold type, with a brief list of its main research areas beneath.

The 'due date' column gives the date(s) on which the EU Official Journal has published a 'call for

### Worth Watching • Andrew Baxter



half of next year which is claimed to be cheaper, simpler to install and more reliable than existing tracking systems. Conventional GPS location devices need at least three satellites to be visible to obtain a usable "fix" on their position. In contrast the device from Spacetrac, which is exploiting technology developed by Eagle Eye Technologies of the US, needs only one satellite in most circumstances.

The mobile unit returns a signal to the satellite from which the base station can measure the satellite's relative distance and speed, and compute the mobile unit's position.

The tracking device, which is about the size of a cigarette packet, is aimed mainly at the vehicle security systems market.

Toad, the UK company which has European rights to distribute the Spacetrac product for vehicle use, expects it to cost less than £150 for the user.

Toad, UK: tel (01223) 214555; fax (01223) 214844; web [www.eagle-eye-tech.com](http://www.eagle-eye-tech.com)

### Adhesion process protects metal

A technique for preparing and protecting metal surfaces, claimed to provide significant environmental and energy saving benefits, has been announced by Brent International, the UK speciality chemicals company.

They say the balance between two counteracting mechanisms operating at different altitudes – one reducing ozone loss and the other increasing it – may be determined by small differences in winter stratospheric temperatures.

The study comes a few weeks

after an international research group warned of a possible feedback effect in northern Europe, with the ozone hole causing colder weather, which in turn helps to destroy ozone even faster.

Alfred Wegener Institute,

Germany (Markus Rex): e-mail

mrex@awi-potsdam.de

### Satellite tracking device

A miniature, satellite-based wireless location device is due to be launched in the second

Full industrial trials are beginning, and follow three years of research by the UK chemicals company and the University of Cincinnati, where the inventor, Dr Wim van Ooij, is based.

Brent has an exclusive worldwide licence to exploit the technique.

Brent International, UK: tel (01753) 651812, fax (01753) 630612

INTERNATIONAL ART GUIDE

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## ARTS

**W**hat have been living for long enough in the post-cold war world to have developed an entirely new set of cinematic clichés: in place of totalitarian monsters who want to rule the world, there are dismantled free marketeers who want to sell it; the soft Byzantine drones of broken eastern Europe have displaced the triumphalist scores of Soviet supremacy. Most importantly, the bad guys want much the same as the defenders of the free world: the biggest Mercedes and stickiest laptop in town.

The baddest guy in *Mimi Leder's The Peacemaker*, however, has the most primitive of motivations: revenge. He is a victim of the war in Bosnia and devises a fiendish plan to make the American people – or at least a couple of blocks in New York – pay. He broods at home playing Chopin, staring moodily at the scarred landscape all around, but his resolve declines to falter. An artistic sensibility only takes you so far.

Half a world away, intelligence officer Thomas Devoe (George Clooney), and nuclear scientist Julia Kelly (Nicole Kidman) jostle with gusto as they try to explain a mysterious nuclear explosion in a remote section of Russia. She is tall, dark, handsome, rational, authoritarian. He is over-emotional, sentimental, "a talented soldier with sloppy impulse control", in Kelly's scathing summation. This is a pleasing inversion of stereotype, and there are some waspish exchanges as Leder, a veteran director of television's *ER*, establishes an impressively fluent pace early on.

But this is an action picture; and soon Michael Schiffer's subtle(s) screenplay has to make way for crashing limos in Vienna, hellish helicopter rides, and a credibility-stretching chase through New York. The too-cool Kelly ("Do not proceed without authorisation!") learns about the serious business of death; jumpy Devoe ("Let's rock and roll!") begins to appreciate the need for discipline. Why does this have the feel of an internal American foreign policy debate?

Absurdly, our heroes first mosey around, then execute the saving of the world. But it is churlish to complain. This is a superior action movie, featuring real emotional responses and at least a morsel of moral complexity which is rare in the genre. Much credit to Clooney, who has perfected his head-down, eyes-up look of longing to a lucrative art; and to Kidman, who has tough-hut-tender to the tee. Most of all to Leder, who keeps her protagonists' hands off each other until they fall into a climactic post-ba-bolic embrace of some understandable intensity.

If the theme of gender-role inversion provides a hefty sub-text to *The Peacemaker*, it springs triumphantly to centre-stage in the week's best film, Alain Berliner's *Ma Vie En Rose*. Ludovic (Georges Du Fresne, quite wonderful) is a



A pleasing inversion of gender-role stereotype: George Clooney and Nicole Kidman in 'The Peacemaker'

## Cinema/Peter Aspden

## Morsel of moral complexity

seven-year-old boy who dreams of being a girl. All seems innocuous enough at first: he waddles amusingly in front of the new neighbours in his mother's red high heels; he pouts and dances in front of the mirror; he dreams innocently, but obsessively, of his dull-cum-television star heroine, "Pan".

But when he begins to make eyes at his father's boss's son, promising to marry him "when he becomes a girl", tensions rise. The fragile harmony of this prosperous corner of wholesome suburbia is gradually threatened, as friends and neighbours are forced to consider their own reactions to Ludovic's increasingly unsettling japes.

His father briskly marches him off to play football, with predictably painful results; his mother, more understanding, agrees to take him to a child psychologist, whose bland questioning makes scant impact on Ludovic's sumptuous dream world. His family, supporting at first, slowly begins to doubt him, and finally virtually disowns him.

It is hard to believe that this is director Berliner's screen debut, such is the assurance with which he (literally) darkens the tone of

his touching tale. He is helped by superb performances by Michelle Laroque and Jean-Philippe Ecuyer as Ludovic's embattled parents, frustrated and lost in a world in which innocent reverie is the harbinger of disaster.

THE PEACEMAKER  
Mimi LederMA VIE EN ROSE  
Alain BerlinerA LIFE LESS  
ORDINARY  
Danny BoyleDARKLANDS  
Julian Richards

Berliner's lightness of touch ensures that he never overplays his theme: the neighbours who finally drive away Ludovic's family are not portrayed as unfeeling monsters, but as families dealing with their own problems: a dead child, an insecure marriage. It is this emotional brittleness which forms the core of the film. The occasional fantastical incursions

into Ludovic's dream world act as a reminder that we are dealing with the gentleness of unorthodoxies; but the power of this intelligent, humane film lies in its careful scrutiny of the devastating consequences.

It is a cinematic truism that everyone thinks they can do romantic comedy; actors who need to boost their charm rating with the public; writers who get the chance to do sex and jokes; directors who think they can get away with an infinite amount of whimsy, and maybe discover a new Audrey Hepburn in the process.

So no surprise to see the genre attract the *Trainspotting* team – director Danny Boyle, writer John Hodge, producer Andrew Macdonald – who must have thought they could revitalise the formula with their idiosyncratic blend of hip humour and striking visuals with *A Life Less Ordinary*. Add the winning combination of Ewan McGregor and Cameron Diaz, both in good form, and what could go wrong?

Plenty. For the golden rule of romantic comedy is immutable: first the romance, then the comedy. If the central relationship is

not conveyed with scrupulous attention to detail, then we do not care; and if we do not care, the girls aren't funny.

McGregor is the inept loser who kidnaps spoilt rich girl Diaz and sets off on the road. Holly Hunter and Denroy Lindo are the "angelic operatives" dispatched from heaven to make them fall in love.

But the logic of the celestial intervention is half-heartedly developed, the relationship between McGregor and Diaz insufficiently combustible. Worst of all, the film sagas hadly in the middle as Boyle resorts to slapstick, as if realising his principals are not cutting it. And *nothing* is as embarrassing as a cute ending to a romantic comedy going wrong...

*Darklands* is a daft story of post-industrial paganism and Welsh nationalism and – this could have been good – the links between the two. The soundtrack is intriguing, but the script miserable and the direction heavy-handed. Possibly worth catching for former Welsh international rugby player Ray Gravell's cameo as a frightening gypsy (sic) welder, which is not all that frightening as his tackling used to be.

## Theatre/David Murray

## An overdone delicacy

all. The generating idea for the play, which won a Pulitzer prize, is what we see, and as an idea it was seriously promising. The life-style of an almost-elderly, well-to-do couple, semi-retired to Connecticut, is fractured when Edna and Harry, their "best friends" of 40 years' standing, descend upon them.

Not, as it turns out, just for a visit, but to move in; because they have been overwhelmed by "the terror", and desperately need support – children gone, occupation done, meaninglessness. Where else to turn, if not to their best friends?

Albee might have devised a dramatic action to develop that vision,

testing the bounds of friendship, loyalty, commonality among a certain class of a certain age.

Instead he was content to lay down the bare structure, and titivate it with elaborate monologues in (one guesses) his own domineering voice – ultra-grammatical sub-clauses, wry qualifications, nagging repetitions. The situation does make itself felt, but oh! through what horrendous verbal thicket!

Eileen Atkins and John Standing are the beleaguered hosts, Agnes and Tobias. She gets the most toruous monologues, and delivers

them with dogged smoothness, too unhesitatingly for any second thought – there are a lot of those – to sound anything but pre-programmed. He is good at looking innocently poleaxed, and is occasionally rather moving.

Edna and Harry are Annette Crosbie, bright-eyed and tidy, and James Laurenson, whose first stammering admission of why they have come is a rare moment of human revelation. There are also two semi-detached characters, Tobias's dipsomaniac sister Claire (Maggie Smith), a permanent guest, and his and Agnes's daughter Julia (Sian Thomas), returning

wounded from her fourth marriage to find Harry and Edna occupying her room.

Thomas adds a welcome note of frank outrage and distress to the proceedings. Dame Maggie is always delightful to watch and hear (though her American accent hails from some hitherto undiscovered state); not the cheerful boozier that Elizabeth Spriggs gave us in the first London production 30 years ago, but something fey and lizard-like, subtly disarming.

Director Anthony Page has marshalled this logorrhoeic piece as expertly as one could fairly expect. It remains a mystery why a house that boasts such a sumptuous drawing-room (designed by Carl Toms, Corinthian pillars and all, should have only three bedrooms).

Theatre Royal, Haymarket, London SW1 (0171-930 6800).

Theatre/Sarah Hemming  
Wartime crisis of confidence

For many of us, the Falklands War has dimmed into a faint memory, but Merridith Oakes brings it bursting back to life with her memorably funny, dark new play.

*Faith* is set "in a remote island farmhouse at a time of war", but given the position of the island, the nature of the war and the language of the enemy, it is pretty clear which conflict she has in mind. Oakes uses the tatty farmhouse kitchen to examine the moral – or immoral – business of war, chiefly through the figure of Sergeant Toby Spiers (Howard Ward), in whom the conflict has precipitated a crisis of faith.

For all his protestations that "the British fighting man is the most highly organised of men", the sergeant's belief in his call has clearly already taken a knock when the play opens.

He fusses around the kitchen in which he and his men have taken up residence, washing mugs and talking to himself about not wanting more killing than is "strictly necessary", to the evident disgust of his lance corporal, a vicious, furious man driven wild by his superior's equivocating stance.

Things come to a head when an order comes through to shoot an American mercenary who was captured fighting for the other side. Scarred that this might amount to cold-blooded murder, Spiers is suddenly faced with the awful possibility that the noble cause for which he has been fighting is no such thing. From on he is free fall.

The sergeant's ruminations form the centre of the play. But while he labours

Continued at The Royal Court Theatre, Upstairs, Ambassadors, London WC2 (0171-565 5000).

## Dance/Clement Crisp

## Wild boy blues

*It* would be good to report that the opening of this year's Dance Umbrella festivities was cause for rejoicing. The Umbrella shelters the good, the bad, and the soul-numbingly indifferent in modern, postmodern and even post-postmodern dance. With Stephen Petronio's troupe (to whom fell the honour of the first performance) we find the exasperating, too.

Dance Umbrella owes everything to the artistic taste and administrative skill of Val Bourne. So Petronio's initial piece at the Queen Elizabeth Hall on Tuesday night paid nice tribute to *ReBOURNE*, if not in its title, then in its steps. Petronio's reputation here as in his native America, is as dance's Wild Boy, its *enfant terrible*. Alas, he is *enfant* no more, but much of this programme was terrible.

There were the usual ingredients of ear-alarming din or fearful noise: the yowling of Diamanda Galas for *Number 4* would delight an audience of tom-cats. (*Number 4* itself, in which four chaps explored the delights of synchronised catatonia, would delight an audience of undertakers.)

Some of the costuming had the air of being badly frightened by a display of negligence; the rest was merely unflattering.

Petronio's companions varied in performance manner from convincing to improbable. The choreography went its predictable way, with bursts of energy and Saharan stretches of dull posturing. Petronio offered a new and unenterprising solo which looked as if his imagination were stuck to the floor. In another piece, generously wired, he leaped over the stage in a slow-motion fall. His companions, in shiny black coveralls and gauzy hits, were Carabosse's retinue in a kinky *Sleeping Beauty*.

It was an arid, desperate show until the last piece, *Lareigne*, in which white-clad dancers (Petronio's wife, with wigs stripped to their inexpressibles, of course) were caught in fast, intriguing, ghostly encounters. Electronic clangour and a perfectly vile song by *The Stranglers* went their barbous way, but the movement caught the imagination, and the dance and the dancers looked alive. The evening was not wholly wasted.

**A**t the Theatre Royal, Haymarket six excellent actors find themselves in a pickle. The pickle is Edward Albee's 31-year-old play, *A Delicate Balance*.

Or no, not – rather, one might call it a cut-glass salad bowl, with soggy leaves at many levels, not perhaps by intention, quite possibly not even probably, but certainly constituting, if one may so speak (leaving everybody and indeed anybody else to attach their own quirk, and no doubt whimsical meanings to the action), grisly challenges to the actors. Which reminds me, by some circuitous route, of something else rather illuminating: but I shall choose, quirkily and even whimsically, not to confess anything about that.

A little of that style goes a long way. *A Delicate Balance* has a lot of it, and it goes hardly any way at

sets and costumes by Andreas Reinhardt; Oct 25

## ■ BILBAO

## EXHIBITION

Guggenheim Museum Bilbao Tel: 34-4-423 2799

The Guggenheim Museums and the Art of This Century: the new museum's inaugural exhibition features more than 300 works of modern and contemporary art from the Guggenheim's collections

## ■ BRUSSELS

## OPERA

La Monnaie Tel: 32-2-229 1211

● La Stellidaura Vendicante: by Francesco Provenzale. New production directed by Philippe Sireuil and conducted by Alessandro da Marchi; Oct 23, 26

● Werther: by Massenet. Concert performance conducted by Wladimir Jurowski, with a cast including Alison Hagley and Jennifer Lamore; Oct 26

## ■ CHICAGO

## EXHIBITIONS

Art Institute of Chicago Tel: 1-312-443 3600

● A Collecting Odyssey: Indian,

Himalayan, and Southeast Asian

Art from the James and Marilyn

Aldorf Collection. Around 200

works of art, primarily Buddhist

and Hindu sculpture spanning

nearly 20 centuries; to Oct 26

● Renoir's Portraits: Impressions

of an Age. Around 65 paintings

spanning the artist's career, of

subjects including Claude Monet

and Madame Renoir. The show has been seen in Ottawa and will travel to Texas; to Jan 4

## OPERA

Lyric Opera of Chicago Tel: 1-312-332 2244

● Idomeneo: by Mozart.

Conducted by John Nelson in a

staging by Jerry Copley; Oct 25

● Nabucco: by Verdi. New

production staged by Elijah

Moshinsky and conducted by

Bruno Bartoletti. Cast includes

María Guleghina and Samuel

Reymer; Oct 24

● Peter Grimes: by Britten.

Conducted by Mark Elder,

making his Lyric Opera debut, in

a staging by Jerry Copley. Ben

Heppner sings the title role; Oct 26

■ COPENHAGEN

## EXHIBITIONS

Frederiksberg Castle Tel: 45-42-260439

Four Hundred Years of Scottish

Portraits: second half of an

exchange organised with the

Scottish National Portrait Gallery

which saw an exhibition of

Danish portraiture in Edinburgh

during this summer's festival.

Now 100 paintings and

photographs by Scottish artists

including Raeburn are on show in

Frederiksberg Castle, 30

kilometres from Copenhagen



Economic Viewpoint · Samuel Brittan

## No 'silver bullet' exists

Increasing the underlying growth of GDP will often require sacrificing much consumption and leisure – and may not even be worthwhile

The UK National Institute of Economic and Social Research used to achieve excessive attention in the 1980s and the 1970s when it tried to second-guess Treasury forecasts and campaign for incomes policies and demand expansion.

In recent years it has turned over a new leaf, but achieves less publicity. Its working model now assumes – what would have been heresy to the founding fathers – that markets clear in the medium to long term, but that there are enough rigidities over periods of up to five years to generate quite large fluctuations in output and activity. Even more important, many of its projections try to tease out what is already implicit in market data. This is quite a difficult technical task, but very different from the old kind of forecasting.

The NIESR does, however, preserve from the old days the rare virtue of explaining clearly the logic behind its findings and not just throwing a set of numbers at readers on a take-it-or-leave-it basis. The analysis is thus useful even to those who do not agree with all the conclusions – often my own.

The most interesting part of its October Review is the special section on "industrial productivity and competitiveness". Forgive the last word. The authors really mean "performance". Earlier attempts to account for economic growth put a large emphasis on a residual which could not be explained either by increase in the employed labour force or capital investment. This left a lot of scope for anyone to insert his or her own favourite diagnosis. More recent studies have reduced the size of this residual – largely because of changes in the way that investment is measured and recognition

of the improved quality of the labour force due to education and training. It does, however, emerge that the residual was quite high in the UK in the 1980s which Nicholas Oulton, the NIESR analyst, suggests was due to the Thatcher reforms.

The habit, however, could be once and for all. The main message that the Review is trying to get across is that there is now "no silver bullet". Increasing the growth rate by a significant amount requires "sacrificing much consumption and leisure". Growth can only be increased now either by a larger number of hours worked or by more investment. Any success in welfare-to-work policies would help. But the main emphasis is put on more investment.

Why does the NIESR not mention overseas borrowing as an alternative method of financing such investment? If the return is sufficient it will be worth the debt service involved, as Ireland has discovered. To give the resulting balance of payments deficit as an argument against overseas borrowing is a sad example of *lumpenconomics* (a third-rate substitute for the genuine article, preached by politicians, diplomats and business statesmen).

In fact, the in-house article by Mr Oulton throws doubt on the pay-off from

cuts, such a tightening requires higher taxes. It is advocated in any case to help reduce the sterling exchange rate now and to control inflation when in European economic and monetary union.

The habit of the economic establishment of recommending higher taxes as the cure for every problem reminds me of the fashion among doctors for recommending weight loss irrespective of the patient's complaint.

Indeed, the aim of promoting the growth of gross domestic product comes under critical scrutiny in a contribution to the Review by Professor Nicholas Crafts of the London School of Economics.

The growth of GDP is a useful measure in dealing with issues such as where a country is in the business cycle or the quality of its economic management in relation to nations of a similar culture and state of development. And it will give one a crude first impression of the relative success of different emerging countries.

But to make it the be-all-and-end-all even of economic policy is pure *lumpenconomics*. GDP needs at the very least to be adjusted for hours worked. A high income gained from working around the clock may be of less value than a smaller income with more leisure.

The second column of the accompanying table ranks countries in terms of GDP per hour worked. There is a dramatic change in ranking compared with crude GDP per person. The US slips from number one to number nine. Singapore, which appeared slightly higher than the UK on crude GDP, drops back to the 21st position. Belgium advances to the number one position closely followed by France, the Netherlands and Germany, in that order.

Even the adjusted rankings need to be taken with a pinch of salt. One wonders how far the continental rankings reflect a genuine

high level of voluntary leisure and how far enforced idleness arising from frozen labour markets.

The final column is an attempt at a more comprehensive index of the "quality of life". Such indices are notoriously subjective. Some of them are produced by fanatical environmentalists or unreconstructed egalitarians as part of their never-ending war against market capitalism.

The Crafts index is more modest. It merely tries to give some weight to unemployment, life expectancy, the death rate and years of schooling. More controversially it adds in political and civil rights – which, once a certain level of affluence is reached, may be more important than material welfare.

Not surprisingly, on this index Singapore goes to the bottom at number 24, with South Korea just above it at 23. It must be said, however, that even when the index is adjusted to give less weight to human rights and more to other indicators, Singapore still ranks pretty low, between 17 and 24. It is no surprise to find Switzerland is number one on the quality of life index, nor that it is closely followed by Sweden and the Netherlands.

Mr Oulton's conclusion is that growth-inducing policies in general "should only be contemplated to the extent that there are distortions in the tax and benefit systems such that people would willingly work harder and save more if these distortions were removed". This leads us back to the earlier teaching of political philosopher Michael Oakeshott that the state best seen as a civil association to enable individuals, families and voluntary bodies to fulfil their own purpose, rather than an enterprise association with purposes of its own. But that is going too deep for the spin doctors.

### World league table

Ranking for 1992	GDP/person	GDP/hour	Quality of life
US	1	1	1
Switzerland	2	6	1
Japan	3	18	2
West Germany	4	4	3
Hong Kong	5	15	4
Denmark	6	11	5
Canada	7	2	6
France	8	2	7
Norway	9	1	8
Austria	10	1	9
Belgium	11	1	10
Sweden	12	10	2
Netherlands	13	3	11
Australia	14	12	3
Italy	15	14	12
Singapore	16	21	24
UK	17	15	13
Finland	18	17	14
Spain	19	13	15
Ireland	20	16	20
Taiwan	21	23	16
Portugal	22	22	22
Greece	23	20	23
South Korea	24	24	23

Source: Crafts, *NIESR Review*

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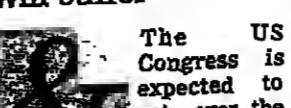
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Personal View · Lee Hamilton

## Trade on a fast track

Without the ability to open up foreign markets, the US economy will suffer



The US Congress is expected to vote over the next several weeks on whether to grant Bill Clinton, the US president, "fast-track" authority to negotiate trade agreements. Under fast-track, Congress agrees to hold single expedited yes or no votes on trade agreements in exchange for extensive input into the president's negotiating strategy.

Without fast-track, US trade policy will grind to a halt because other governments will not conclude trade deals with the president if Congress can later revise them. Agreements that expand trade will create jobs and raise wages both in the US and elsewhere.

Between 1974 and 1994 every US president had fast-track authority. They used it to achieve two substantial worldwide agreements that cut trade barriers and boosted US exports. Earlier this year, the US nailed down agreements, initiated before fast-track authority lapsed, that will cut prices for international telephone calls and eliminate barriers to exports of information technology products.

Mr Clinton's conclusion is that growth-inducing policies in general "should only be contemplated to the extent that there are distortions in the tax and benefit systems such that people would willingly work harder and save more if these distortions were removed". This leads us back to the earlier teaching of political philosopher Michael Oakeshott that the state best seen as a civil association to enable individuals, families and voluntary bodies to fulfil their own purpose, rather than an enterprise association with purposes of its own. But that is going too deep for the spin doctors.

A far more effective way

to encourage others to improve labour and environmental standards would be to help them grow. For that they need increased trade and the US needs fast-track.

Fast-track is also important for the achievement of important US foreign policy objectives:

• Most Latin American nations have embraced democracy and free markets. Increased trade with the US will stimulate growth providing a payoff for painful reforms. That will satisfy democracy and enhance US influence.

• US-led efforts to reduce trade barriers in the Asia-Pacific Economic Co-operation Forum (Apec) will help maintain America's leadership role in Asia.

• Better access to world markets is critical to the success of economic and political reform in eastern Europe, and to the independence of the countries of the former Soviet Union.

• US-led efforts to reduce

trade barriers have contributed to a dramatic increase in global prosperity since the second world war, reducing the potential for international conflict.

• Trade is an increasingly important dimension of international relations. Continued trade leadership will reinforce US foreign policy leadership. A rejection of fast-track will signal a retreat from our role as world leader.

Despite the power of these arguments, deep-seated concerns about the impact of trade on the US economy are threatening not only fast-track, but also public support for trade liberalisation. Several things must be done.

First, the president must persuade Americans that, if he is granted fast-track, he will use it aggressively to knock down foreign trade restrictions and deliver agreements that increase good-paying jobs.

Second, programmes to help workers adjust to foreign competition should be strengthened. Expanded trade benefits the US economy as a whole, but it does hurt some workers, especially the less skilled.

Finally, a better job must be done of explaining the importance of trade to the US. We need to highlight the jobs created by exports and the benefits of imports both to consumers and producers and to explain that low productivity in developing countries often neutralises any competitive advantage provided by their low wages. We need to document the strength of US manufacturing, and how US workers are being hurt by recent trade agreements concluded without our participation – because of the absence of fast-track authority.

Fast-track will empower the president to open foreign markets – to the benefit of the US economy and US foreign policy. Without fast-track, our economy's potential will be unfulfilled, and our international leadership will be diminished.

The author is the ranking Democrat on the International Relations Committee

## LETTERS TO THE EDITOR

Number One, Southwark Bridge, London SE1 9HL

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Translation may be available for letters written in the most important languages.

### Euro: currencies' centre of gravity

From Mr David Martin  
MEP.

Sir, Whereas in the UK the public debate on Euro still centres on questions of "if and when the euro happens, should we join?", in the US they have made up their minds. They are convinced that there will be a single European currency, and they want to know how it will affect the dollar in the global market place.

Europe creates 30 per cent of the world's wealth and accounts for 20 per cent of international trade. But with 14 currencies, the UK's role in the international monetary system is limited. The introduction of the euro on 1 January 1999 will vastly increase the European Union's power and ability to create wealth. Does the UK seriously want to exclude itself from that possibility?

Without getting into the

arguments about differing fiscal policies, economic cycles and mobility of workforce, it is clear that at a basic level an arrangement whereby any one of the members may exercise its sovereign right to withdraw when the prevailing climate is not to its liking, cannot last.

We are all aware of the theoretical advantages of Euro. The real question is whether or not political union is acceptable to Europe's voters and this should be the starting point of any discussion on Euro.

It is entirely illogical to

advise addressing the one crucial difference: political union. While your writer touches on this by asserting that the power of national jurisdictions will be less significant to countries, he fails to state the obvious: that is, that Euro cannot and will not work without political union.

Without getting into the

arguments about differing fiscal policies, economic cycles and mobility of workforce, it is clear that at a basic level an arrangement

from the British public.

An additional bonus will be no sales tax. At the moment, books are zero-rated for VAT purposes. But if European harmonisation is to be complete, then British books will have to be taxed too. All the more reason to buy American. Unless internet tax is imposed...

Peter B. Nowell,  
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London EC4V 3SB, UK

Volatility of pound will continue

From Mr R. J. Farrell

Sir, Andrew Sentance (Letters, October 16) says that recent volatility in the sterling exchange rate made entry into economic and monetary union highly undesirable. If the pound stays out of Euro it will almost by definition remain a volatile currency, as it always has been. The volatility has been a continual devaluation to compensate for generally higher UK inflation.

Euro has two main influences on foreign exchanges via a vis the pound and D-Mark. First, the D-Mark has weakened because of its replacement in a few years by a weaker euro.

Second, the pound has strengthened relative to the D-Mark and other European currencies mainly because it appears Britain will not join Euro.

If the UK decided to join, the pound would naturally quickly adjust itself to a more stable and realistic level prior to entry. The UK might then experience financial stability, low interest rates (horror) and an easier life for exporters (of which we are one, but probably not for much longer).

R. J. Farrell,  
managing director,  
Farrat Machinery,  
Balmoral Road,  
Altrincham,  
Cheshire WA15 8SH, UK

Removing conflict of interest in the global 'super-firms'

From Mr John Corr

Sir, Jim Kelly ("When a crowd", October 20) highlights a potentially significant conflict of interest between the duties of an auditor and those of a management consultant, particularly when the proposed mergers of four of the "big six" accountants will leave 88 per cent of the FTSE 100 Index companies using the two newly pro-

posed global super-firms. Perhaps the risks of conflicting interests could be removed by preventing the legally appointed auditor from providing other services to its clients?

John Corr,  
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Deviess,  
Wiltshire,  
SN10 8SE, UK

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bailou

## COMMENT &amp; ANALYSIS

## Chilled by an ill wind

Turmoil in Hong Kong's financial markets is testing confidence in the territory and the exchange rate system, says John Riddings

## FINANCIAL TIMES

Number One Southwark Bridge, London SE1 9HL  
Tel: +44 171-873 3000 Telex: 922186 Fax: +44 171-407 5700

Thursday October 23 1997

## The right road to Emu

However the British government's forthcoming statement concerning its intentions towards European monetary union is nuanced, it must say two things to reassure business, the markets and the UK's European partners. First, it must state a clear commitment to join Emu in principle early in the next century. Second, it must say how it intends to prepare for entry.

Unless it does both these things, Labour will be hard pressed to re-establish its credibility after the turbulence of recent weeks. Worse still, it will risk jeopardising the prospects of joining Emu for the foreseeable future. The results could be a growing estrangement from Europe and a punishment from the markets.

Against this background, quibbling about the precise date for entry seems trivial. What matters is the government's commitment and its actions.

So what is the government's real difficulty? Gordon Brown, the chancellor, has said much in recent days about the misalignment of the economic cycles in Britain and continental Europe. This clearly is an obstacle to entry in 1999. But when the chancellor addresses parliament, he should not exaggerate the difficulty. It need not stand in the way of a broad commitment to join later.

What would be worst is continued uncertainty. This would keep UK long term interest rates higher and sterling stronger than they need be, deter investment and damage business. Moreover, it would sit ill with Labour's professed ambition to lead in the EU.

Mr Brown's statement must therefore do more than make a vague gesture towards Emu. He will need to start a programme to prepare Britain for entry on or around 2002.

## Exchange rates

Even if this commitment were hedged - as it should be - it would be more likely to promote the period of stability which Mr Brown says he wants than would a continuation of the present confusion. France, Ger-

many and the other core countries which expect to join Emu in 1999, have enjoyed stable exchange rates for more than a decade. Their desire for Emu has caused their long term interest rates to converge, and short term rates are now moving in sync.

For the UK, such harmony might seem distant. The real value of sterling is some 15 per cent above its average for the period 1984-96. UK interest rates at 7 per cent are almost four percentage points higher than those in Germany.

## Further rise

These facts would indeed raise difficulties if the UK wanted to join Emu in 1999. However, high interest rates with a high exchange rate could reflect a market expectation that both will fall to continental levels in five years' time.

Even a further rise in rates might not alter such expectations if it helped to convince the markets that UK inflation was under control for good. But Mr Brown will find it much harder to instil this expectation without a firm commitment to Emu. That would show a determination not to soften the official inflation target. More important, it would be the best guarantee that the government will stick to a tight fiscal policy.

Such claims reflect the role of the exchange rate system since the peg was set at HK\$7.80 to the US dollar during a financial crisis in 1983. Backed by China, it has proved a source of stability through political upheavals, the anxieties of the period after the Tiananmen Square massacre, and the Sino-British wrangles of the transition.

Investors see the peg as a guarantee of the value of their assets and the financial foundations of the 'one country, two systems' concept," says the managing director of one Hong Kong blue-chip company.

Aware of what is at stake, the Hong Kong government has underlined its commitment to the currency system. "There is no political or economic need for us to disband the Hong Kong dollar peg," Donald Tsang, the financial secretary, said yesterday.

"The linked exchange rate has served us very well for the past 14 years," said Tung Chee-hwa, the territory's post-colonial governor. "We see no reason to change it."

Such arguments receive support from surprising quarters. George Soros, the US-based financier and nemesis of fixed-rate regimes, last month described the maintenance of confidence as the priority in a financial services centre such as Hong Kong. "The advantages of stability outweigh the disadvantages of being overvalued," he told an audience at the annual IMF/World Bank meeting last month.

But amid the regional upheaval, these disadvantages are increasingly significant. "Hong Kong has been looking very exposed and its competitiveness has been blunted by the devaluations in the region," says the head of capital markets at EIZW (Asia).

Although Hong Kong banks are robust, with non-performing loans well below 5 per cent and high capital adequacy ratios, they are heavily exposed to any

stake in Korea First Bank, the government has returned to the bad old days. Nationalisation is the easy way out. The signal it sends is that the government is, once again, ready to act as guarantor. The consequence will be deepening moral hazard, in which the banks carry on lending as before to fund inefficient and failing businesses, in the belief they will eventually be bailed out.

Foreign capital

Matters have been made worse by the barriers to foreign participation in the Korean economy. The country's capital markets remain largely closed to foreign investors. The equity market has a ceiling for overseas investment, and the bond market is closed to it entirely.

But Korea can no longer afford this insularity. It needs to allow greatly increased foreign participation in its markets. There are two ways in which liberalisation would help the economy to get back on its feet. First, the stronger 'chaebol' (and there are some which remain in very good health) would gain access to cheaper foreign capital. This would improve their financial position and allow them, perhaps, to take over some of the failing companies.

Second, the government could encourage overseas companies to consider buying up some of the weaker 'chaebol', or even legalise hostile takeover bids by overseas companies.

Foreign investment is, admittedly, no ready panacea. Korea cannot expect really significant interest from foreign companies until it changes its labour market. At present, it is virtually impossible to fire workers in Korea without provoking serious labour unrest. Reform will be painful, but is desperately needed before rationalisation can take place.

The Korean government must show that it is prepared to loosen the reins, and let market forces take over. In doing this, it should not be afraid to seek outside help. As the finance minister knows, this is the only route to prosperity.

## Market forces

Until yesterday, the signs were encouraging. Two troubled 'chaebol', Hanbo Steel and Sammi Steel, were allowed to fold earlier this year. Banks were forced to take losses. At last the government appeared to be retreating from its all-powerful role at the head of the economy, and to be allowing market forces to run their course. The banks swiftly took heed, and called in loans from other 'chaebol' heading for problems. The painful shift from a centrally-planned economy to one based on the market had begun.

With the bailing-out of Kia, and the recent acquisition of a

like the seasonal typhoons that gather strength above the South China sea before heading north to wreak their havoc, the region's financial turbulence has swept into Hong Kong.

Just a few months after the territory returned to China, regional currency crises have prompted a plunge in the stock market, a sharp rise in money market interest rates and injected a note of financial instability into a surprisingly smooth political transition. Apart from steep losses, investors have been left with concerns about the exchange rate system - the linchpin of the economy - which pegs the Hong Kong dollar to the US greenback.

"We are seeing the denouement of the south-east Asian currency crisis," says John Mulcahy, managing director of toodotus W.I. Carr Securities, citing pressures on the Hong Kong dollar. "We are shaping up for the gunfight at the OK Corral." The wave of devaluations across south-east Asia, says Mr Mulcahy, has focused attention on Hong Kong's exchange rate system, the region's last formal peg, and on its economic competitiveness.

For Hong Kong, the stakes are high. "If the peg were to go it would be a devastating blow to confidence," says Chi Lo, senior regional economist at Deutsche Morgan Grenfell. "Take away the currency link and this place looks like a house of cards," adds one equity strategist at a US investment bank.

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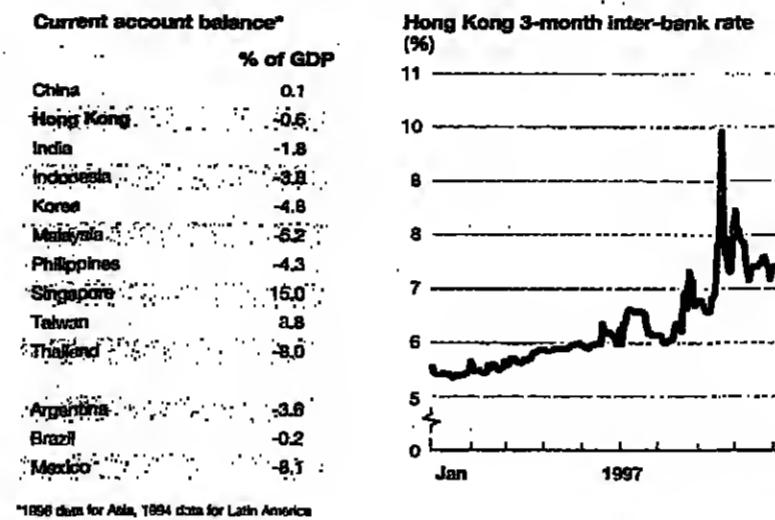
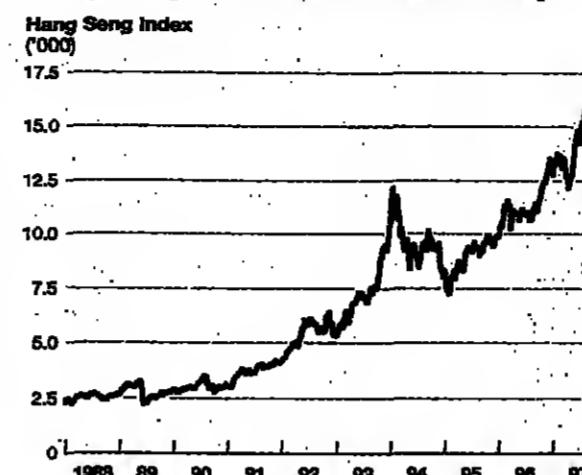
But Korea can no longer afford this insularity. It needs to allow greatly increased foreign participation in its markets. There are two ways in which liberalisation would help the economy to get back on its feet. First, the stronger 'chaebol' (and there are some which remain in very good health) would gain access to cheaper foreign capital. This would improve their financial position and allow them, perhaps, to take over some of the failing companies.

Second, the government could encourage overseas companies to consider buying up some of the weaker 'chaebol', or even legalise hostile takeover bids by overseas companies.

Foreign investment is, admittedly, no ready panacea. Korea cannot expect really significant interest from foreign companies until it changes its labour market. At present, it is virtually impossible to fire workers in Korea without provoking serious labour unrest. Reform will be painful, but is desperately needed before rationalisation can take place.

The Korean government must show that it is prepared to loosen the reins, and let market forces take over. In doing this, it should not be afraid to seek outside help. As the finance minister knows, this is the only route to prosperity.

## Hong Kong: financial markets in a spin



downturn in the property market. "More than half of banks' loans are to the property sector, and to China and the region - and not to the US," says Mr Lo at Deutsche Morgan Grenfell.

Tourism is particularly vulnerable to the impact of devaluations, having already been battered by a sharp fall in Japanese visitors.

"What should have been a bumper year is turning into the worst situation for passenger revenues in decades," said David Turnbull, managing director of Cathay Pacific, in a recent letter to staff at the Hong Kong airline.

"It is without doubt one of the toughest periods we have faced for many years."

James Tien, chairman of the general chamber of commerce, this week hinted at a review of the exchange rate peg, warning of its impact on manufacturing industries. Mr Tien's views, though described by the chamber as personal, were seen as marking a crack in the business community's solid support for the currency system.

With more than 80 per cent of gross domestic product coming from services, the real threat lies in the property and banking sectors, the twin pillars of the economy. Money market interest rates have jumped from about 7 per cent at the start of the week to more than 10 per cent yesterday.

"With interbank rates having shot up, it is inevitable that banks will have to raise prime rates and mortgage rates," says Archis Hart, director of equities at EIZW (Asia).

As inter-bank rates have climbed this week, it seems clear which course is being dictated by Joseph Yam, the head of the HKMA. The monetary authority declines comment on signs of speculation. But market commentators noted strong selling pressure.

But since reserves do not cover all of M3, the broadest measure of money supply, the Hong Kong

dollar is still potentially vulnerable to a collapse of public confidence. But at the institutional level, at least, the authorities' discipline is strong. As Mr Lo at Deutsche Morgan Grenfell puts it: "The HKMA is a single-minded sentinel of the peg, acting as a money changer with absolutely no domestic policy obligations."

In the battle against speculators, the HKMA has other technical advantages over its regional counterparts. A limited number of Hong Kong dollar marketmakers, based onshore, and a real-time gross settlement clearing system means that any assault in the region are quickly apparent.

In the past, this arsenal has proved more than adequate. Hong Kong shrugged off the side-effects of the 1985 Tequila crisis sparked by Mexico's devaluation in Latin America. A speculative attack in July was repelled within a matter of hours, according to Mr Tsang, the financial secretary.

The longer the regional turmoil and the more damage that is done to Hong Kong's economy, the more difficult the defence could become. While many market commentators hold out the prospect of reforms to the exchange rate system a few years down the road, perhaps to a basket of currencies, few see any changes so near the handover or during a period of financial upheaval.

"The peg can withstand these pressures," says Stephen Shu, chief regional economist at Standard Chartered Bank. But there is certain to be a rocky ride for the markets and a stiff test of Hong Kong's resolve.

## Financial Times

## 100 years ago

Turkey And Greece  
Constantinople: In order to expedite the conclusion of a definitive treaty of peace, it has been decided that the Turkish and Greek Plenipotentiaries shall hold daily sittings. They met yesterday and to-day at the Ministry of Foreign Affairs. The Porte has sent a fresh telegraphic circular to the Ottoman representatives abroad, instructing them to request the Powers to which they are accredited, to hasten the pourparlers to be held in this city regarding the Cretan question, on the basis of the principle of autonomy already conceded to the island.

## 50 years ago

Eisenhower Candidate?  
General Eisenhower, Supreme Allied Commander during the war, will "in all probability be Republican candidate for the next United States Presidential election." Mr. Henry Wallace, former U.S. Vice-President, told the Jerusalem Jewish Journalists' Association at a lunch in his honour to-day. Mr. Wallace said: "If Eisenhower runs on either a Republican or Democratic ticket, he will win hand down. A ticket with Eisenhower and Harold Stassen (former Governor of Minnesota) running against Truman would carry all but the Southern states..."

## OBSERVER

## How now, Dow Jones?

■ Michael Price, the investor once labelled "the scariest S.O.B. on Wall Street", is still at it. What if, he wonders, two of America's most illustrious family-controlled companies were to join forces? "It would be an absolute knock-out deal," the New Jersey-based investor mused yesterday.



# FINANCIAL TIMES

Thursday October 23 1997



## Dutch appeal after court overrules EU trade deal

By Gordon Cramb in Amsterdam

The Dutch government will today begin an appeal against a national court ruling that prevents it from going along with a decision reached by the European Union's council of ministers.

The ruling by judges in The Hague forbids the Dutch from co-operating in the EU's planned retreat from a trade regime that favours imports from present and former colonies in the Caribbean.

Legal experts say it is the first time any national court in an EU member country has overruled its government's position on a council issue. In this case, as the issue requires unanimity among member states, the ruling also means that the council's decision cannot be implemented until the legal position is settled.

The European Commission has been trying since 1993 to water down an accord that gives so-called Overseas Coun-

tries and Territories (OCTs) free access for agricultural and industrial products. The Dutch had strongly opposed changes to the schema, which had allowed its OCTs, the Netherlands Antilles and Aruba, to build a processing industry for consumer commodities.

But Hans van Mierlo, foreign minister, at a meeting with his EU counterparts in Luxembourg on October 6, gave way on the issue under pressure from Brussels.

His reversal came just hours after the scheduled ruling by the district court in The Hague in a case brought by Emesa Sugar, owner of a processing plant in Aruba. The court found that Emesa's export business would otherwise evaporate and that the EU had little to fear economically from the arrangement as it stood.

In a more detailed judgment last Friday, the legal bench said that representatives of the Antilles and Aruba had been overruled by Dutch ministers that same morning so the Lux-

embourg meeting could reach a rapid compromise which the government knew would preempt the court's finding.

It ruled that the political decision reached in Luxembourg was non-binding and forbade the Netherlands to co-operate with EU plans to curb produce of OCT origin until the European Court of Justice had clarified matters. The fine if these strictures were ignored was F150m (\$248m).

The Hague foreign ministry argued that it was not obliged to wait for the outcome of the case, but acknowledged that it can do nothing until there is a verdict on the initial appeal at the national level, expected in November, when EU permanent representatives will also discuss the setback. If the judgment is upheld, a European court announcement could take years.

Dutch sugar ruling, Page 7  
Netherlands survey, separate section

## Frankfurt outstrips London's Liffe on long bonds

By Samer Iskander in London

Germany's chances of dominating the futures market for long-term government bonds were given a significant boost this week when Frankfurt's market share in Europe's most liquid instrument rose above London's for the first time.

Deutsche Terminbörse yesterday said it had traded 183,846 futures on German 10-year bonds - bonds - or 52 per cent of total activity on Tuesday against 189,460 lots on the London International Financial Futures and Options Exchange.

The news is likely to increase competition among Liffe and its French, Swiss and German rivals, which forged an alliance last month to offer all their products on a single electronic trading platform. It also weakens Liffe's claim that its open outcry trading, where traders face each other on a large floor, offers better liquidity - the ability to trade large amounts - than electronic trading, which is cheaper.

"We have to concede that DTB is making inroads into our market share," Liffe said yesterday. "But this is only on one simple product. More complicated instruments (such as options and short-term interest rate futures) are still much more liquid in open outcry."

DTB yesterday said it was confident it would retain a "steady 50 per cent share of the [bond] market for the rest of the year".

Liffe still has a significant lead over its European rivals on short-term interest rate contracts.

But dominance of bond futures, Europe's most actively traded long-term bond contracts, is seen as a key factor in the fight for market share in the run-up to European economic and monetary union.

The market for interest rate derivatives is expected to shrink as Esmi brings the financial markets of participating countries closer together, reducing the need for futures and options as a protection against sharp moves in interest rates.

Traders said Tuesday's event was symbolically important. "A lot of people have been waiting for this to happen," said a derivatives salesman at a large Paris bank, also active on Liffe.

DTB has been gradually increasing its share of the bond market - from around 30 per cent in January to roughly 45 per cent during the summer.

Bonds, Page 22

## Telecoms suitors to begin formal bid talks with MCI

By Alan Cane in London and William Lewis and Richard Waters in New York

MCI, the US group at the centre of one of the most dramatic takeovers struggles in telecommunications history, will today begin formal talks with its three competing suitors - WorldCom, GTE and British Telecommunications.

The first discussions will involve MCI, BT and GTE, which last week made a \$25bn all-cash offer for the US operator. MCI and BT will then hold talks with WorldCom, whose own all-share bid is worth about \$30bn.

MCI is expected to be represented by Bert Roberts, chairman and chief executive; BT by Sir Iain Vallance, its chairman, and Sir Peter Bonfield, chief executive; GTE by chairman Charles Lee; and WorldCom by chief executive Bernard Eibbers. Informal talks

between the four companies took place this week but today marks the beginning of the formal process.

Sources close to the discussions stress as an important factor BT's conviction that although its offer for MCI - at about \$24bn in cash and shares - is the lowest of the three, its 20 per cent holding in MCI and other legal factors have equipped it with a partial veto over other bidders.

BT can, for example, delay a hostile bidder from taking control of MCI for a year. But advisers to other companies involved in the bidding say that while BT is in a position of influence, it will be MCI's decision. "BT has some cards, but they should not be overstated," one adviser said.

BT has consistently said its preferred global telecoms partner is MCI, indicating that it still believes its original merger plan with MCI could be

consummated, with a third partner - almost certainly GTE - brought in on favourable terms at a later date.

Some advisers suggested yesterday that such a solution would have the least problems in finding regulatory approval, as all the mandatory clearances have been secured. This scenario is thought to be similar to one devised by BT and GTE in talks before the WorldCom bid.

But others involved in the talks reacted with incredulity to the idea that BT could succeed with its bid without raising the value. "There would have to be a lot more money offered or some funny gas sucked if MCI's shareholders go for BT," one said.

Tomorrow WorldCom will try to step up the pressure on GTE by highlighting at a press conference in Washington DC the regulatory difficulties its rival may have with its bid.

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## Boeing blames loss on strong demand

Continued from Page 1

analyst at Lehman Brothers in New York said: "The issues for investors now is that it will take Boeing most of 1998 to work through the production ramp-up. The group will probably have a great 1999, but that is a long way away."

By mid-day yesterday, Boeing's shares had fallen 8 per cent to \$49.75.

Wolfgang Demisch of Bankers Trust warned: "This industry is still in a rampant up-phase and that means there

could be more problems next year." He expressed concern that Boeing would have to take an additional \$1bn charge in the fourth quarter from写ing down assets of McDonnell Douglas, which Boeing acquired earlier this year.

Analysts believe that Boeing is set to stop producing McDonnell Douglas civil aircraft. Boeing said yesterday, however, that it had not yet made any decisions on the future of the McDonnell Douglas civil aircraft programmes.

Boeing first made its produc-

tion problems known in September, when it said it would have to delay the delivery of 12 aircraft. Boeing could not say yesterday whether further deliveries would be delayed.

Mr Condit said the sudden increase in demand had caused "major inefficiencies throughout the entire process chain".

Materials, aircraft and parts were in the wrong places and recruiting the new employees had caused further inefficiencies. He said it would take until next year for production to be fully restored.

Bonds, Page 22

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Continued from Page 1

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Bonds, Page 22

## Europe today

Most of Scandinavia will have rain followed by sunny spells and showers. Eastern Europe will be windy with bursts of rain, but central and western Europe should be dry with some sunshine after early fog has cleared. Around the Pyrenees, there will be heavy rain or thunderstorms. The Iberian peninsula will be fine, apart from showers in the north-west. Southern Italy will have more showers, with brief spells of sun, but northern Italy will have more sunshine after some early mist. Greece will have heavy showers and occasional thunderstorms.

### Five-day forecast

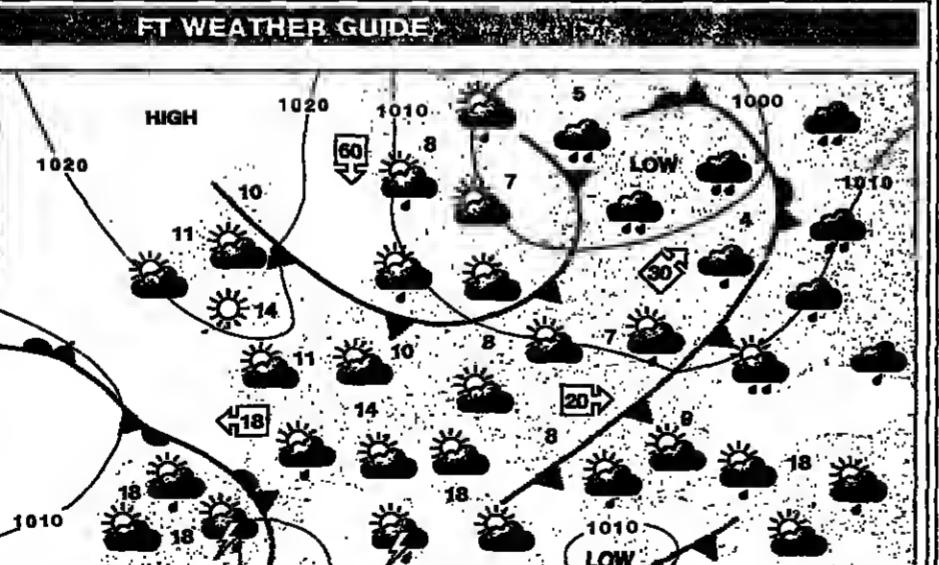
The Mediterranean will become unsettled again with further showers or thunderstorms in central and eastern areas. It should become fine on Saturday, apart from some rain moving into Portugal. Much of central and western Europe will stay dry, but the east and north-east will have more showers, with snow over northern Scandinavia.

### Today's temperatures

	Maximum	Minimum	Sun	15	Cardiff	Fair	12	Frankfurt	Fair	11	Madrid	Fair	19	Rangoon	Fair	32
Abu Dhabi	Cloudy	30	Bogota	Fair	10	Cloudy	8	Cloudy	14	Cloudy	10	Cloudy	14	Cloudy	5	Cloudy
Acra	Fair	31	Bonn	Fair	10	Cloudy	11	Glasgow	Fair	10	Rio	Fair	25	Riyad	5	Cloudy
Athens	Cloudy	25	Bermuda	Fair	10	Cloudy	11	Hamburg	Rain	9	Manila	Fair	10	Rome	18	Cloudy
Auckland	Cloudy	12	Bogota	Fair	20	Dallas	Shower	Helsinki	Sleet	1	Shanghai	Fair	32	S. Fraco	20	Cloudy
Athens	Thunder	21	Bombay	Fair	34	Delhi	Sun	Hong Kong	Fair	31	Malta	Fair	21	Seoul	18	Cloudy
Athens	Sun	18	Brussels	Fair	11	Dubai	Fair	Hong Kong	Fair	31	Medina City	Fair	22	Singapore	33	Cloudy
Barcelona	Fair	23	Budapest	Sun	10	Dublin	Cloudy	Hong Kong	Fair	30	Madrid	Sun	22	Stockholm	7	Cloudy
Barcelona	Fair	22	Copenhagen	Fair	28	Dubrovnik	Cloudy	Hong Kong	Fair	29	Montreal	Fair	18	Toronto	10	Cloudy
Barcelona	Fair	22	Copenhagen	Fair	22	Edinburgh	Cloudy	Hong Kong	Fair	33	Montreal	Fair	18	Toronto	8	Cloudy
Barcelona	Fair	22	Copenhagen	Fair	22	Faro	Fair	Istanbul	Fair	18	Montreal	Fair	18	Toronto	10	Cloudy

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	Situation at midday. Temperatures maximum for day. Forecasts by PA Weather Centre									
Sun	15	Cardiff	Fair	12	Frankfurt	Fair	11	Madrid	Fair	19
Fair	10	Copenhagen	Fair	8	Glasgow	Fair	14	Malaga	Fair	24
Fair	10	Bonn	Cloudy	11	Hamburg	Fair	10	Malta	Fair	24
Fair	9	Cologne	Cloudy	11	Hamburg	Rain	9	Manila	Fair	20
Fair</										



# FINANCIAL TIMES COMPANIES & MARKETS

Thursday October 23 1997

Week 43

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## INSIDE

### Nike strikes back in sponsor wars

Nike, the Oregon-based sportswear group which sponsors the stars of Brazil's national soccer team, including Demolion, left, announced an eight-year sponsorship deal with the US Soccer Federation worth \$20m, two days after it lost out to its arch-rival Adidas of Germany in the race to sign up the New Zealand All Blacks rugby team. Page 18

**Property takes a global view**  
The property consultancy business used to be largely a home-grown sector in the UK. But multinational corporations increasingly want a single, professional adviser to meet their property needs across the world. Page 21

**Banking on the high rollers**  
Many Far Easterners love a flutter, but can gambling stocks help brokers looking to buck the downward trend in share prices? A report by Flemings, the investment bank, suggests the quoted gaming sector is a good bet. Page 34

**Saudi Arable to focus on natural gas**  
Saudi Arabia, holder of the world's largest oil reserves, is to focus its future exploration effort on natural gas in order to meet surging domestic demand. Page 24

**Colombia to sell 10-year Treasuries**  
For the first time in Colombia's history, investors will be able to buy 10-year Treasury paper (TEEs) through an auction today. Page 22

## Companies in this issue

AGF	17	Kao	19
American Express	7	Kia Motors	17
Amek Tambang	19	Krung Thai Bank	19
Artemis	17	Lasseleberger	20
Athene	17	Lehman Brothers	17
Artois	20	Land Lease	16
BASF	20	MCI	16, 17
BMW	20	MagyarCom	20
BT	16	Matav	20
BZW	17	Mercedes-Benz	20
Bally	20	Mirror Group	30
Bankers Trust	17	Morgan Stanley	17
Barclays Bank	17	National Mutual	16
Bayerische VB	20	Oerlikon-Böhme	20
Boeing	7, 16	PSM	22
British Aerospace	17	PolyGram	20
CEA Industrie	17	Promodis	20
Cable & Wireless	20	Protean	21
Carlton	20	Rallye	20
Casino	20	Rio Tinto	24
Centrica	30	Rolls-Royce	30
Centrus	21	SAP	17
China Telecom	19	SCA	20
Culligan	17	SGS-Thomson	17
DMG	21	Salomon Brothers	21
Dana Petroleum	17	Seita	20
Dassault Aviation	20	Shell Int'l Chemical	20
Dolphi	21	SmithKline Beecham	21
Delta Air Lines	1, 7	Somesal	17
Deutsche Bank	20	Tabacalera	20
EDS	17	Tekco	19
Electra Fleming	21	Teletra	19
Erste Bank	17	Thomson-CSF	17
France Telecom	17	Tobu Electric	22
Frankfurter Hypo	22	UPS	7
GTE	16	United Biscuits	17
General Motors	7	VW	20
General	17	Volvo	20
HSBC	30	Wolseley	30
Hypo in Essen	20	WorldCom	16
Hypo-Bank	17	Worms & Compagnie	20

**Market Statistics** <http://www.ft.com>  
Annual reports service 22, 29 FTSE Actuaries share index 39  
Benchmark Govt bonds 22 Foreign exchange 23  
Bond futures and options 22 Gilts prices 22  
Bond prices and yields 22 London share service 28, 29  
Commodity prices 24 Managed funds service 25-27  
Dividends announced, UK 22 Money markets 23  
EMU currency rates 23 New Int'l bond issues 22  
Eurobond prices 22 Bourses 22  
Fixed interest indices 32 Recent issues, UK 30  
FTSE-A World Indices 30 Short-term int'l rates 23  
FTSE Gold Mines Index 30 US interest rates 22  
Emerging Market bonds 31 World stock markets 30

## CROSSWORD, Page 24

## Chief price changes yesterday

FRANKFURT (DM)		PARIS (FFP)	
Alusuisse	22.2 + 8.4	Bilbao	743 + 17
Horizon	227 + 4	Horizon Aviat.	401 + 15
Int. Werts.	458 + 13	Italia	410.3 - 5.5
SAP AG	500 + 20.2	Itouques	582 - 20
Volksbanken	1184 + 35.5	Carol Plus	1036 - 32
Goldschmidt	575 - 10	Lagard	1142 - 37
Alusuisse	32 + 2	Delacoste	888 + 38
Gasunie	308 + 24	Genes	357 + 23
J.W. Direct	308 + 24	Kia Motors	489 + 39
USG-Dolphi	193 - 10	Minist. Of	361 + 31
Bonacolm. Scen.	50% -	Koziak	720 - 23
Hausbau Pow.	19 - 27	Santander	855 - 18
Vestcor	31 - 119	HONG KONG (HKD)	
London (Pounds)		Paribas	
Alusuisse	665 + 80	Paribas	24.0 - 2.75
Domex	375 + 414	Bk of Fr.	43.75 + 4.0
Domex Print.	2156 + 43	Cheng Kong	55.0 - 7.75
Premiers	238 + 38	China Res.	17.3 - 5.7
Protean		New Wind Dev.	22.7 - 4.2
Paribas		Standard Ind.	17.5 - 0.5
Cable & Wirs.	480 - 27	Wing Hang	13.85 - 3.35
Scatolines	582 - 26	BARZERK (Swed)	
TOURONTO (C\$)		Bilbao	
Alusuisse		Bk of Fr.	
Domex	210.0 + 2.25	Bk of Fr.	
Gasunie	7.75 + 1.0	Thal. Int'l	1225 + 1.75
Star Data	5.75 + 1.3	Thal. Wm. Fd.	17.5 + 1.5
Wiemart			
Paribas			
Hyd. Power	4.05 - 0.4	BKX Distr. Med.	22.5 - 2.5
Lawrence St.	25.0 - 5.0	Bur. Jester	50.0 - 5.0
Sumitomo Gold	3.75 - 0.75	Bil. Rader	15.75 - 1.75

New York and Toronto prices at 12.30pm

## FINANCIAL TIMES

# COMPANIES & MARKETS

Thursday October 23 1997

Week 43

Offering equal to 17.4% of company's current market value

## SGS-Thomson \$2bn share issue

FT reporters

Investment bankers are working on a new \$2bn issue of shares in SGS-Thomson Microelectronics, the Franco-Italian semiconductor manufacturer.

An offering of this size would represent about 17.4 per cent of the \$11.5bn market value of the group, based on yesterday's closing share price of FF43.9.

The company, sometimes held up as a model of European high-tech development, is currently 64.4 per cent owned by French and Italian state-controlled entities.

The offering, which has not

yet been filed to financial regulators, may represent the last issue of SGS-Thomson shares for some time because the Socialist-led French government is intent on keeping a majority of the group in public hands.

The principle whereby Italian and French state-controlled entities hold an equal stake also looks certain to be adhered to.

Morgan Stanley, the US investment bank, is understood to be the global coordinator of the issue. The other banks involved in the deal are Salomon Brothers, Deutsche Morgan Grenfell and Lehman Brothers. The expec-

tated dominance of US houses in the issue prompted one analyst to say: "For a big global industry that wants to raise \$2bn you need people with distribution in the US."

"I can't think of a French group that can offer that. This is all part of the investment banking story."

Demand for an eventual issue is expected to be particularly high in the US from investors keen to buy technology stocks.

A number of recent developments have indicated that conditions for a new issue of the company's shares were starting to fall into place. In September, Thomson-CSF,

the French defence electronics group, said it was selling its 17.2 per cent stake in SGS-Thomson to CEA Industrie, the French nuclear technology group, and France Telecom, the former monopoly operator recently part privatised in the largest ever French initial public offering.

Such developments often trigger substantial institutional buying of the shares of the companies concerned.

SGS-Thomson is listed in Paris although it quotes figures in US dollars. In July, it reported a 48 per cent decline in first-half net income from \$851.1m to \$422.6m after issuing a profit warning earlier in the year.

None of the investment banks involved in the deal was prepared to comment yesterday.

**Pinault gives up attempt to buy Worms**

By David Owen in Paris

François Pinault, the French financier, yesterday abandoned his attempts to buy Worms & Compagnie, apparently leaving the path clear for a friendly takeover bid which the conglomerate's leading investors launched earlier this month.

The move had been widely expected because of a sharp increase in the price of shares in AGF, the French insurance group and one of the investors in Worms, after AGF became the subject of a separate FF5.5bn (\$9.25bn) hostile bid by Assicurazioni Generali of Italy.

AGF shares closed last night at FF31.80, having stood at FF23.84 when the friendly cash-and-paper offer for Worms was launched. As a result, this offer values Worms well above the FF410 a share, or FF30bn, offered by Mr Pinault through Artémis, a holding company.

Artémis said yesterday that the amount to be paid to those tendering their shares to the friendly offer bore no relation to the economic value of Worms. It had therefore decided to withdraw its offer. AGF's shares are also above the FF300 a share offered for it by Generali.

In addition to AGF, which owns 7 per cent of Worms, Italy's Agnelli family is also involved in the friendly bid.

Under the proposed deal, Soneal, a company owned by the Agnellis, would raise its stake in Worms from 20 per cent to 100 per cent. AGF would take a stake in Soneal and acquire Athéna, Worms' insurance subsidiary, for FF12bn in cash and shares.

Mr Pinault's thwarted takeover bid was part of an unprecedented wave of corporate activity in France in recent weeks. Many see this as a sign that aggressive Anglo-Saxon-style management practices are starting to become more acceptable in the country's traditionally stuffy boardrooms.

Artémis's bid was explained by the Pinault camp as an attempt to diversify the financier's interests into areas such as financial services while ensuring a future for Worms' wide-ranging industrial interests.

Editorial comment, Page 15

## Management and workers reject rescue package

## South Korea to nationalise carmaker Kia

By John Burton in Seoul

South Korea yesterday said it would nationalise the troubled Kia Motors and sell its truck division - a reversal of its decision not to rescue the nation's third largest carmaker.

The proposed state takeover was rejected by Kia's management and workers, who staged a walk-out in protest over the loss of corporate independence and the expected ousting of senior executives. Korea's largest trade union organisation also threatened an industry-wide strike.

"The government acknowledges the quick end of Kia's problems is the most urgent task to stabilise financial markets and to improve confidence in our economy," said Kang Kyung-shik, the reform-minded finance minister, who had earlier rejected state aid.

The financial problems at Kia since mid-July have caused the Seoul bourse to fall to a five-year low and the currency, the won, to reach a record low. The stock market responded to yesterday's announcement with a 6.1 per cent jump to 601.32 points.

The government also appeared to be bowing to political pressure in a presidential election year in which the leading candidates have called for a state rescue of Kia to prevent job losses among its 22,000 workers.

The state-run Korea Development Bank will take a controlling 30 per cent stake in Kia through a debt-for-equities swap, one of the first such deals in Korea, after placing the car and truck units under court receivership.

Court receivership will guarantee that creditor banks can begin recovering their loans to Kia within one year and reduce their exposure to Kia's large debts of Won10.500bn (\$1.45bn).

A court decision to freeze Kia's debt payments as it sought bankruptcy protection from creditors for five years had forced cautious finance institutions to withdraw loans from other highly leveraged companies that set off a recent string of bankruptcies.

Plans to sell Asia Motors, Kia's truck division, will also help pay debts. Daewoo has expressed interest in it.

Mr Kang said it would be up to the next government, which will be elected in December, to decide whether Kia would remain a state-run company or be sold to another Korean carmaker. Samsung is believed to

have a competitive advantage in the debt markets, particularly in view of the fact that these have been underperforming businesses."

Mr Diamond said the company was taking a big bet that a large liquid European credit market would develop rapidly following European monetary union. "The single currency means the beginning of an incredible period for corporate finance in Europe," he said. In the new European credit market, the focus would be on credit rather than currency risk. Mr Diamond believes that Barclays Capital will play a "significant and important part" in the development of the nascent European high yield market.

## COMPANIES AND FINANCE: THE AMERICAS

## Brazil's Varig joins Star airline alliance

By Arkady Ostrovsky  
in Rio de Janeiro

Star Alliance, the world's most powerful airline grouping, moved into Latin America yesterday when it formally welcomed Varig, Brazil's main airline, as a full member.

The alliance - which is led by United Airlines of the US and Lufthansa of Germany and includes Air Canada, Thai Airways and Scandinavian Airlines System - will now gain access to all the Latin American cities served by Varig.

"Varig is Latin America's oldest and best known airline, and flies to every major destination in South

America. Today we're delivering a continent to our customers," the group said in a joint statement. Star Alliance is also understood to be in talks with Cathay Pacific Airways and Singapore Airlines to increase the group's share of the Asia-Pacific market.

Airlines like Star offer passengers joint benefits and issue tickets with the same shared code, allowing them to buy tickets on flights operated by other carriers in the group. Airlines are also able to check passengers and their baggage all the way through regardless of the number of changes on route to the final destination.

The Star partners also offer a joint mileage programme which enables passengers to accumulate and redeem mileage points on each of the alliance flights. Passengers are able to use 185 lounges around the world controlled by different members of the group.

Jan Steinberg, president of SAS, says the allied airlines will also improve co-ordination of traffic, making interconnections between flights more convenient. Jürgen Weber, Lufthansa chairman, said the alliance would improve transparency, giving passengers more information about which carrier they would be flying with.

Members of the alliance, which last year had revenue of \$45.7bn and 230,000 employees, say the partnership also delivers financial benefits to companies by reducing overheads and increasing their purchasing power.

Mr Weber said Lufthansa made DM300m (\$176m) from partnership operations last year and estimated the profits would reach DM400m next year.

He said the partners were planning a "landlord" programme, which means, for example, that all ground services for alliance members in Germany would be provided by Lufthansa, while Varig

would have a similar responsibility in Brazil.

Last year British Airways and American Airlines announced plans for a similar link-up but their proposed deal has run into strong opposition from the European Commission.

Star has also been a subject of a Commission investigation, but Mr Weber is confident of no regulatory problems. "You cannot compare apples and pears. Unlike BA and American, we do not have a monopoly on any of our routes. We have 11 competitors on our US routes and our market share is less than 30 per cent."

## Nike sponsors US soccer for \$120m

By Patrick Harverson

Nike, the Oregon-based sportswear group, yesterday announced an eight-year sponsorship deal with the US Soccer Federation worth \$120m.

The contract comes two days after Nike lost out to its arch-rival, Adidas of Germany, in the race to sign up the New Zealand All Blacks rugby team.

On that occasion, Adidas topped Nike's offer to the New Zealand Rugby Football Union with a bid worth more than \$45m over five years.

But yesterday the US group got its revenge as it clinched the US soccer deal, despite a last-minute challenge from Adidas.

Competition among global sportswear brands has always been strong, but it has intensified noticeably in the past year as the biggest brands - among them Nike, Adidas, Reebok of the US and Umbro of the UK - have spent increasingly large sums signing up prominent international teams and national clubs.

The sportswear companies are willing to spend heavily because they believe the wearing of their logos by the world's top sports stars is a highly effective way of marketing their shoes and clothing to brand-conscious consumers.

This explains why Nike has chosen to sign a new deal with the USSF that is worth about 10 times as much as the company's current contract with the federation, which dates back to 1994.

Nike is gambling that soccer - which lags some way behind American football, basketball and baseball in popularity among US sports fans - will take off in the country.

The sponsorship deals are not only getting bigger; they are becoming more complex.

Jim Trecker, spokesman for the USSF, said the deal with Nike had "many components. It's more than a money deal. It's much more of a partnership between the two."

The new contract is likely to be similar to the record-

breaking \$200m, 10-year deal that Nike struck with the Brazilian football federation last year.

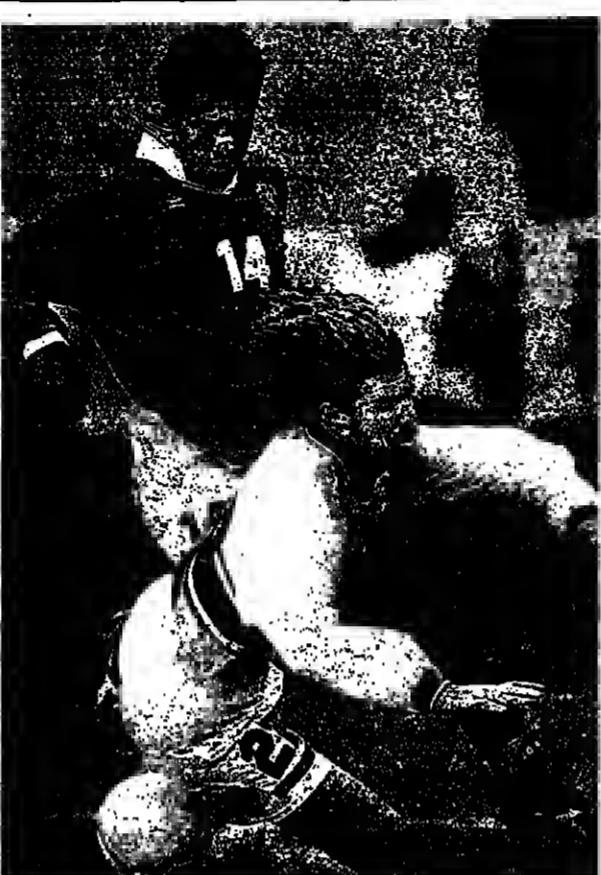
Under the terms of that contract, Nike is allowed to arrange five friendly internationals for the national team each year.

In return, Brazilian football receives a sum of money up front, a royalty on the sale of all Brazil shirts, support for improvements to the game's infrastructure in the country, and backing for youth training.

The sports brand war shows no signs of abating. Several other prominent sporting contracts are due for renewal soon, among them the right to sponsor the England football team.

The English Football Association's deal with Umbro, the UK football-only sportswear company which has struggled to match the spending power of its bigger rivals, runs out in 1999 and the FA has already begun negotiating a new contract.

Among the bidders have been Nike, Admiral (a brand which is owned by the



Events such as the USA's victory over Guatemala in a World Cup qualifier last year can only help the game in the US

quoted UK company Hay & Robertson Adidas) and Reebok.

The same companies have also been fighting each other

to sponsor top rugby teams. Adidas has the All Blacks, Nike recently added England to its roster, while Reebok has Australia and Wales.

## US sees mass production of 'clean' cars

By John Griffiths

The US Department of Energy and an industry research group are claiming a research breakthrough which, they say, will allow volume production of cars powered by virtually emissions-free fuel cells - but still using petrol as the fuel source - within the next 5-10 years.

Simple portable power packs using the technology, such as mobile generators, would be on the market before the end of the decade, the group said.

If the technology works as well as the research is claimed to indicate, the project - led by consultants Arthur D. Little (ADL) - would overcome the biggest single obstacle preventing the environmentally "clean" fuel cell solving many of the world's car exhaust emissions problems.

A spokeswoman for USCAR - a research consortium linking Chrysler, Ford and General Motors - said yesterday that the technology opened up the prospect of volume production of the "clean" family cars, using conventional petrol stations for refuelling, by the year 2010.

"There are still some technical downsides needing a lot of development work; nevertheless, this looks like a major step forward," USCAR said.

Fuel cells generate electrical propulsion power by chemically combining hydrogen and air, producing mainly water vapour and heat as an "exhaust".

## Strong third-quarter recovery at PepsiCo

By Richard Tomkins  
in New York

PepsiCo, the US snacks and soft drinks company that has suffered a string of troubles over the last year, yesterday reported a strong recovery in third-quarter net profits from \$144m to \$658m.

In last year's third quarter, PepsiCo's soft drinks division suffered a profits

slump, mainly resulting from its unsuccessful attempts to vanquish Coca-Cola outside the US. It took an after-tax charge of \$376m to restructure the business.

Since then, PepsiCo has also suffered weakness in its Pizza Hut, Taco Bell and KFC fast-food business

from last year's losses to record operating profits of \$76m.

PepsiCo said it had changed its bottling arrangements

in several smaller markets. Volume had been strong in emerging markets such as China, and the company had also seen steady progress in "critical mass" markets in Europe and Asia.

Domestic operating profits

from soft drinks fell from \$435m to \$425m amid tough price competition. But thanks to the recovery on the international side, the soft drinks division reported an overall 40 per cent increase in operating profits to \$500m.

The snack foods business

saw strong gains in North America and overseas, growing operating profits 16 per cent to \$486m. North America profits rose 14 per cent to \$376m and international profits 25 per cent to \$90m.

## Charges drag DuPont to net loss of \$17m

By Tracy Corrigan  
in New York

DuPont, the US-based chemicals company, yesterday reported third-quarter net earnings before charges of 88 cents a share, 1 cent below analysts' estimates, according to First Call.

After non-recurring charges of \$989m, or 88 cents a share, the company showed a net loss of \$17m for the third quarter or 2 cents a share. The charges were mainly due to a previously announced write-off relating to a biotechnology acquisition.

Jeff Clanci, chemicals analyst at Bear Stearns, said the write-off was wholly

favourable tax treatment for a biotechnology acquisition.

"In the third quarter, our underlying business continued to perform at record levels, driven by strong volume growth from our chemicals and specialities businesses, and record earnings from petroleum," said John Krol, DuPont's president and chief executive officer.

DuPont recently announced its purchase of ICI's pigments and polyester businesses and the sale of its hydrogen peroxide business.

DuPont's sales for the quarter totalled \$11.1bn, up from \$10.5bn. Petroleum sales by the Conoco unit rose 8 per cent to \$5.3bn, despite lower crude oil

prices, and analysts said they are expecting a strong performance from this business in the fourth quarter.

Mr Clanci said that the company's earnings showed it was on track to produce double-digit growth.

Chemical segment earnings rose 12 per cent to \$1.54bn, reflecting higher earnings from white pigments and specialty chemicals.

Fibres segment earnings of \$238m were up 16 per cent, reflecting increased earnings for Dacron polyester, Lycra brand spandex and aramids, but partly offset by lower nylon earnings. Polymers segment earnings were \$228m, up 7 per cent.

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## COMPANIES AND FINANCE: ASIA-PACIFIC

# Lend Lease, National Mutual may link

By Elizabeth Robinson  
In Sydney

Shares in Lend Lease, the Australian financial services group, rose 8.3 per cent yesterday after it said it was in talks to merge its MLC Australian and New Zealand fund management and insurance businesses with National Mutual, the demutualised life insurer controlled by AXA-UAP, of France.

The groups said a successful merger would "combine the skills and business strengths of MLC and National Mutual to create in Australia a strong competitor to the major banks and financial services organisations".

The merged unit would rival AMP, the largest fund manager with more than A\$50bn (US\$36.3bn) under management in Australia and New Zealand, according

to Intech Asset Consulting. National Mutual manages more than A\$20bn, while MLC has A\$20.6bn under management and a further A\$4.4bn in its life operations.

The companies would not reveal how they proposed to merge the units, but observers said the combined group could have a market capitalisation of A\$12bn. Axa, which owns 51 per cent of National Mutual, is expected to retain a substantial stake

in the merged company. Lend Lease shares closed A\$2.72 higher at A\$33.32, while National Mutual rose 2 cents to A\$2.41.

Standard and Poor's, the credit-rating agency, placed Lend Lease's AA corporate rating on CreditWatch with negative implications, saying the proposed merger raised uncertainties over ownership and regulation.

The fund management arm is Lend Lease's largest

division. S&P said: "If successful, the merger will create Australasia's largest fund management and life insurance group in terms of premium income."

The two groups said the units were complementary and the merger plans were in line with the recommendations made this year by the Wallis inquiry into financial services.

The reforms adopted as a result of the Wallis report

allow non-banks to enter bank territory, while forbidding mergers between the big four national banks. The groups said they would not release further details of their plans until they had conducted due diligence.

Earlier this week, National Mutual said it was guaranteed an opportunity to operate in China after being granted an option to buy into the licence awarded to Axa.

## ASIA-PACIFIC NEWS DIGEST

## Kao cuts full-year forecast to Y20bn

Kao, the Japanese toiletries and household products manufacturer, may post an extraordinary loss for the current financial year due to restructuring at Kao Info-Systems, its US information technology subsidiary. Kao revised downwards its full-year forecast from Y29.5bn to Y20bn (\$16.6bn) of unconsolidated post-tax profit, while raising the forecast for recurring pre-tax profits 5 per cent to Y6.3bn.

Half-year figures showed that poor performance at Kao Info-Systems contributed to a 10.9 per cent fall in net profit to Y12.5bn in the six months to September 30. Sales slipped 1.1 per cent to Y336.7bn, while pre-tax profit grew 13.8 per cent to Y31.6bn. The interim dividend increased 5.0 to Y1.5, as expected.

In the domestic market, sales were affected by the increase in consumption tax. Household product sales were worst hit, declining 3.2 per cent, but sales of personal care products and cosmetics held up well, showing an increase of 0.4 per cent. Sales of chemical products grew 12.5 per cent to Y50.9bn.

Bethan Hutton, Tokyo

## ■ THAILAND

### Krung Thai seeks Bt5bn

Krung Thai Bank, Thailand's second largest commercial bank, is to boost its capital Bt5bn (\$130m) by offering 500m new shares to existing shareholders. The Thai government, which owns 60 per cent of the bank, is the buyer of the last resort for the shares, which will be sold at about half the price of yesterday's close of Bt19.75.

Krung Thai is the eighth Thai bank to announce a capital increase this year. So far only one, the tiny Lam Thong Bank which sold 40 per cent to foreign investors, has been successful in raising additional capital.

Krung Thai said the additional capital was needed to increase provisioning and to help shore up its capital base.

In spite of a rise in non-performing loans, estimated to be around 11.5 per cent of total loans, the bank lowered its third-quarter provisioning by 96 per cent quarter-on-quarter to Bt1.5bn. The capital increase is only the first of several Krung Thai will need because, according to brokers Merrill Lynch, its capital-to-risk assets ratio is stretched at 6.5 per cent.

Ted Bardacke, Bangkok

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## Currency hang-ups for telecoms offers

### Stock market turmoil means delays for issues slated for this year

The debuts this week of two of the biggest telecommunications offerings in Asia are likely to be the last in the region this year, bankers say.

Issues from the Philippines, Malaysia, Indonesia and South Korea are expected to be postponed because of the region's stock market and currency turmoil - potentially delaying network expansion and accelerating rationalisation.

"It's not just initial public offerings, but a fundamental rethink reverberating right through the entire Asian telecoms market," says Will Wylie, chairman of the Asian Infrastructure Fund.

The two that were launched this month - China Telecom and Telstra, of Australia - are seen as special cases in the current volatile environment.

China Telecom - the commercial arm of China's Ministry of Posts and Telecommunications, which makes its debut in Hong Kong today and opened in the US yesterday - marks foreign investors' first opportunity to buy into China's telecoms sector.

The offering was unveiled in the summer, at the height of Hong Kong's so-called "red-chip frenzy", when share prices of mainland-backed companies were doubling and trebling.

But the flotation, while

successful on most measures - the domestic portion of the US\$4bn offering, Hong Kong's biggest, was 30 times subscribed - disappointed the market, and yesterday the shares were trading below the issue price in the grey market.

Telstra also attracted strong domestic demand. "The price was favourable," says Mr Wylie. "It was all very similar to Margaret Thatcher's [former UK prime minister] privatisation push with British Gas."

But for those waiting in the queue, the outlook is bleak. "I believe that the IPO window, except for China Telecom, is effectively closed for the moment," he says.

"Any issue would have to be structured and priced so conservatively that companies would say 'let's explore all other avenues for achieving network build out targets rather than go to the market in a bearish mood'."

Craig Racine, regional telecoms analyst at Peregrine Brokerage, believes none of the Asian telecoms IPOs slated for this year will make it to market, with the possible exception of MTNL of India.

Instead, he sees a trend for existing shareholders to inject more capital, either as equity or loans. Smart of the Philippines, a much-delayed (and scaled-back) IPO is a case in point: shareholders

have indicated their willingness to commit further funding when the need arises.

The need for capital is the crux of the issue. Telecoms deregulation in Asia is still in its infancy, but in some countries, particularly the Philippines, the pace has been swift and the number of operators has swollen substantially over the past three years.

While governments have opted for different concessions, mandatory expansion targets are not uncommon. Without the necessary funding, operators may be obliged to go back to the regulators and request an extension.

"We've been talking about rationalisation in Malaysia's cellular sector for two years, and have heard that parties are now talking to each other. This may be the impetus for that to take place," says Mr Racine, at Peregrine.

A second concern is that

analysts believe that such requests will be granted, given the current climate - and because owners of the concessions are generally well connected.

For investors, the tempo-

weakened economies and devalued currencies will hurt consumer demand for telecoms services.

AIR, with large investments in the Philippines, as well as Indonesia, India, China, Pakistan and Sri Lanka, believes underlying demand remains strong.

"Real companies producing real goods and real services have been remarkably unaffected by the currency turmoil," says Mr Wylie.

He predicts the setback could also accelerate consolidation, which will see weak and under-capitalised companies absorbed by the bigger operators.

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analysts believe that such requests will be granted, given the current climate - and because owners of the concessions are generally well connected.

For investors, the tempo-

rarity dearth of Asian telecoms issues will matter less given the wealth of telecoms issues coming out of Europe.

"Institutional funds have plenty of telecoms issues to

choose from. A global telecoms fund has no need to invest in Asia if the value is not there," says Mr Racine.

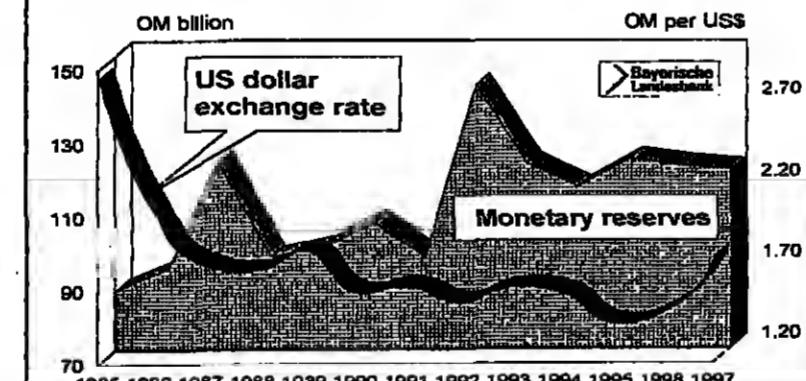
Louise Lucas

## BAYERISCHE LANDES BANK MONEY AND CAPITAL MARKETS

**Opinions differ about the impact which the euro will have on European bond-market rates, but the prospect of the currency change-over has already had an important effect: the "traditional" interest differentials have largely disappeared. The European bond markets have thus already set up a kind of monetary union.**

## A MONETARY UNION WITHOUT THE EURO

In the wake of the debate on the euro, the leading investment currencies' yields have converged to a large extent. The maximum spread between the long-term D-mark rate and the long-term rates of countries regarded as potential EMU participants



The Bundesbank's monetary reserves have hardly changed in the past few years. Their present value is approximately DM 115 billion. Sharp increases occurred in 1987 and 1992, when interventions to support the sinking dollar (1987) and currency unrest in the EMS (1992) caused the Bundesbank's official reserves to swell temporarily by DM 41 billion and DM 92 billion respectively. Other assets currently account for a good DM 70 billion, or some 60 percent, of total reserves, not counting the dollar holdings already transferred to the European Monetary Institute (EMI), the precursor to the European Central Bank. The Bundesbank's ECU balance at EMI has shrunk from DM 29 billion to an amount just over DM 21 billion since early 1996, because other European central banks have stepped up the settlement of obligations incurred in connection with EMS interventions in the past. For many years, gold reserves have been carried in the Bundesbank's books at a value of DM 13.5 billion.

outside the "core group" has narrowed from 5.7 percentage points to 0.7 points in the past two years. The spreads between the currencies of the core group of EMU candidates have disappeared completely. For example, the yield on ten-year French government bonds has equalled that on German federal bonds with the same maturity for almost a year, while two years ago the minimum spread was still as wide as a full percentage point. Along with France, Belgium, the Netherlands and Austria are also in Category A, ie, their ten-year government bond yields match the yield on ten-year German

"bunds". While the ten-year rate in the Netherlands fell into step with the ten-year D-mark rate as early as two years ago, the rates of the other countries in this category have undergone an (in some cases quite impressive) adjustment process in the meantime. The second category, Category B, comprises those EU countries whose current long-term yields are less than one percentage point above the D-mark benchmark. The countries in question are Denmark, Finland, Ireland, Italy, Spain and Portugal.

Private and institutional investors do not yet know how the national capital markets will behave in the run-up to the euro's introduction and how the European capital market to be set up in the near future will work. But one thing is certain: the approaching single European currency will speed up the elimination of the remaining yield differentials. Category B countries' yields will probably converge on those of Category A countries as it becomes increasingly certain that 1. the euro will be introduced and that 2. these countries will be among the first participants.

One cannot say as yet, however, at what level this convergence will take place. According to the Eurosceptics, the countries already belonging to the group of hard-currency countries will have to pay a yield premium throughout the interest-rate cycle. In other words, the pessimists predict that euro-bond rates will hit bottom at 6 per cent, or even 6 1/2 per cent, in future cycles. Up to now, the lower turning point in the market for ten-year German bunds has been about 5 1/2 per cent (1978, 1987 and 1997). This prediction is based on the assumption that, since the euro is prone to weakness in the international markets in the long run, a parallel upward shift is bound to occur in the yield curve. From the fact that some countries will fail the "deficit test" (according to the Maastricht treaty, the budget deficit must not exceed three per cent of nominal GDP), the pessimists draw the conclusion that stability will not be given the necessary priority and that this will impose a handicap on the euro capital market right from the start.

On the other hand, there are sound reasons for assuming that introduction of the euro will not cause a general deterioration in the interest-rate climate and thus a rise in the euro rate. If such a deterioration were to be expected, yields would have risen already in the past few months as the probability of a punctual launch of EMU increased. For it is a well-known fact that capital markets tend to anticipate future trends and events, even if they are just beginning to take shape. Actually, however, interest rates in the potential EMU member countries have remained stable.

The convergence of interest rates in Europe is not least the result of the gains in stability. The EU's average inflation of 1.7 per cent provides, as it were, a solid basis for a "dream constellation" of interest rates with only marginal spreads. Hence European monetary union already exists, even without the euro.

Bayerische Landesbank, Department of Economic Research  
Briener Str. 18, D-80333 München, Fax (089) 2171-1329

## Aneka Tambang to set IPO price

By Sander Thoenes  
in Jakarta

Aneka Tambang, the state-owned nickel and gold mining company, will today announce its share offering in the first Indonesian privatisation this year.

The initial public offering will be for 430.8m shares, or 35 per cent of its equity, in early November. The company hopes to list the shares later this month on the Jakarta and Surabaya stock exchanges. Analysts have said the prospective price range could be between Rp1,700 and Rp2,000.

The sale is going ahead despite a 32 per cent drop in the Jakarta Stock Exchange index, from 742.9 in the summer to 505.2 yesterday, precipitated by a rise in interest rates and a drop in the rupiah. The government is eager to boost its fledgling capital market and encourage local listings for mining

ventures, most of which are now listed in Canada. Many Indonesian companies are struggling to pay off short-term hard currency debt, much of it unhedged, but a government injection of capital, in exchange for equity, helped Aneka Tambang reduce its short-term debt to Rp125.1bn (\$35m) by June 30. Its commodities are sold in dollars so the currency depreciation should have only a limited impact.

Recent discoveries have boosted the company's proven and probable nickel reserves to 58.2m tons. Nickel production rose 36.6 per cent to 3.43m tons in 1996. Gold production rose to 1,955.5kg. But low nickel and gold prices drove profits down to Rp16.9bn for the first half of 1997, from Rp18.1bn previously.

In its prospectus, the company pledges to boost gold exploration and improve nickel processing.

Bayerische Landesbank

## COMPANIES AND FINANCE: EUROPE

## Sharp rises at Vereinsbank, Hypo-Bank

By Andrew Fisher  
In Munich

The two Bavarian banks which are merging to form Germany's second-biggest bank yesterday announced sharp rises in profits for the first nine months as they began a series of roadshows in connection with a capital increase.

The combined improvement in operating profits after risk provisions, for Bayerische Vereinsbank and Bayerische Hypotheken- und Wechsel-Bank - expressed as a pro forma financial statement ahead of

the merger - was 26 per cent to DM2.3bn (\$1.29bn).

The impact of buoyant capital markets on commission income and trading profits, and relatively weak earnings in last year's comparative period, were mainly responsible for the increase. Both banks expect profits for the full year to rise some 15 per cent.

Vereinsbank reported a 26 per cent rise in operating profits to DM1.3bn, which Albrecht Schmidt, the chairman, said was above expectations. Hypo-Bank's results were up 24 per cent to DM1bn.

Mr Schmidt, who will be chairman of the new bank - to be called Bayerische Hypo- und Wechsel-Bank - said it would have a private customer base of 3.7m, with deposits of around DM265bn, giving it a market share in Germany of 4.3 per cent.

With some DM180bn of assets under management - excluding Foreign & Colonial, the UK fund company controlled by Hypo-Bank - it will be Germany's third largest asset manager with a market share of nearly 10 per cent.

The combined bank's lending

volume is about DM600bn, of which DM410bn is in low-risk mortgage finance. It will be Europe's largest property financing bank.

Vereinsbank owns 45 per cent of Hypo-Bank after a share exchange offer, and is raising capital by DM3bn through a rights issue and global offering to strengthen its balance sheet ahead of the merger.

Mr Schmidt said Hypo- und Vereinsbank aimed to obtain 30 per cent of its income from commission business which did not tie up capital. At present, the figure for the two banks is about 22 per cent.

The pro forma statement showed the largest share of profits came from net interest income, up 5 per cent to DM7.1bn. Net commission income from securities and other fee-based activities was DM2.2bn, up 41 per cent. Financial trading profits rose 88 per cent to DM507m.

The banks have already announced a joint target of 15 per cent for net return on equity, each managed less than 9 per cent last year. Wolfgang Sprissler, a Vereinsbank director, said the aim was to pass 11 per cent by the end of 2000.

## Sterling bond by German bank

By Edward Luce

Hypo in Essen, one of Germany's leading banks, yesterday broke new ground with the first sterling denominated bond by a German mortgage bank.

The bond - or Pfandbrief - will extend one of the world's largest bond markets to UK investors.

At about \$960bn, the Pfandbrief sector is the second largest bond market in Europe (after Italian government bonds, which account for \$372bn in outstanding paper).

Yesterday's £150m issue, which is expected to be followed by sterling bond issues by other German mortgage banks, is the latest sign of the aggressive internationalisation of the Pfandbrief market.

"With European monetary union approaching, the German mortgage banks need to broaden their investor base," said HSBC Markets, which jointly lead-managed the deal with Commerzbank.

In the Pfandbrief market, borrowers provide collateral to the investor to reduce the risk of holding the paper. Unlike asset-backed bonds, where the bondholder has a legal claim over a specific portion of the borrower's assets, Pfandbriefs are issued from the borrower's general balance sheet.

The device enables the German mortgage banks to improve their credit ratings and lower their funding costs.

Hypo in Essen, Germany's sixth-largest mortgage bank, yesterday offered UK investors a relatively cheap price for the bond as an incentive to buy the paper.

At 20 basis points over seven-year UK government bonds, the spread was roughly double that offered recently by other AAA-rated borrowers in the sterling market.

## International sales help lift PolyGram

By Alice Rawsthorn

PolyGram, the Dutch entertainment group, mustered a 21 per cent increase in third-quarter net income to F1.85m (\$42.3m), in spite of the sluggish state of the global music market.

Alain Lévy, president, said the group benefited from both strong international sales of new albums by Elton John, 911 and Boyz II Men and the local success of acts such as Jacky Cheung in Hong Kong and Germany's Rammstein.

In the film division, box office receipts from *Bean*, *The Ultimate Disaster Movie* and *The Game* contributed to a robust increase in turnover. However, film stayed in the red because of the cost of launching PolyGram's US distribution arm.

PolyGram's shares rose immediately after the announcement, only to fall as the Amsterdam market

softened. They closed 60 cents lower at F1.1490.

The group, which is 75 per cent-controlled by Phillips, the Dutch electronics concern, managed an increase in net profit per share from 39 cents to 47 cents during the three months to September 30, after a 34 per cent rise in the total to F1.267m.

However, sales of about F1.64m came from two charity tributes to Diana, Princess of Wales: Elton John's *Candle in The Wind 1997* and the *BBC Recording of the Funeral Service*. PolyGram will donate the profits from both recordings to charity.

Excluding their sales, its third-quarter revenues rose 26 per cent to F1.248m, with music contributing F1.026m, against F1.1.728m, and film F1.470m, compared with F1.277m.

Operating income rose 13 per cent from F1.115m to F1.130m after a 21 per cent improvement from music off-

set increased losses from film.

Mr Lévy said the music division was buoyed by robust sales of existing albums from Texas, Sheryl Crow and Hanson, as well as new releases. Sales of catalogue recordings by Elton John and the Bee Gees also rose strongly in the US.

The restructuring of the music division, which will result in the loss of 550 jobs, is almost completed, according to Mr Lévy, although PolyGram has yet to fill senior positions at its Island and Motown record labels.

Mr Lévy said he expected continued growth from music during the fourth quarter, buoyed by new releases from Bryan Adams, Hanson and Sting. He expected the film division to move into the black as *Bean* comes out in the US, and *The Borrowers*, *A Life Less Ordinary* and *Spice World* debut in the UK.

PolyGram expects titles such as *A Life Less Ordinary* to return its film division to profit in the fourth quarter



## State tobacco groups plan link

By David White in Madrid

Seita, the French tobacco group, and Tabacalera, its state-controlled Spanish counterpart, yesterday announced plans for a strategic alliance which would enable them to join forces in international markets and acquisitions.

The two companies said they would study collaboration in marketing their cigarette brands and in bidding for other companies which were being privatised.

They also hinted at the possibility of closer links, saying they would seek to exploit "all opportunities for commercial and industrial synergies".

However, the Spanish

company stressed there was no immediate plan for shareholding ties with Seita. It also said the accord was not connected with the Spanish government's plans for selling its 32 per cent stake in Tabacalera next year.

The proposed alliance marks a fresh step in foreign expansion by Seita, which was mostly privatised in 1995, and for Tabacalera.

Tabacalera emphasised that agreement had been reached only "in principle". But it said that co-operation was the only way the two companies, which were broadly similar in their range of products, could secure a significant position in the world market against the dominant US groups.

As well as promoting sales in areas such as eastern Europe and Asia, the two clearly want to avoid a repeat of last December's setback in the privatisation of Tabacalera, the Portuguese tobacco company.

Both companies were bidders, but the Portuguese government opted to sell a 65 per cent stake to Philip Morris, of the US, allied with Portugal's Jorge de Melo group.

Tabacalera, with Empresa Madre de Tabacos, had entered a higher bid of Es36.5bn (\$20.3m), against Es33.2bn offered by Philip Morris.

"Possibly if there had been a joint bid with Seita we would have had more of a

chance," Tabacalera said. "We still think our bid was the best."

The Spanish company listed Romania, Bulgaria and Morocco among privatisation prospects.

Tobacco groups were excluded from taking part in the initial public offering now under way of shares in Austria Tabak, and Tabacalera said there might be a possibility of taking a shareholding in a further stage of privatisation.

Seita moved into the Polish market last year by taking control of ZPT Radom, the country's third largest producer. The Polish company had reached an industrial and commercial agreement with Tabacalera.

Stripping out non-recurring items, operating profits rose from SKr1.2bn to SKr10.7bn (\$1.38bn), on sales up from SKr11.6bn to SKr13.9bn. The figures were distorted by a big non-core disposal last year.

Pre-tax profits fell from SKr1.2bn to SKr10.7bn (\$1.38bn), on sales up from SKr11.6bn to SKr13.9bn as the group benefited from favourable currency shifts and buoyant sales of its \$40/V40 model.

The figures were at the upper end of analysts' expectations, helping Volvo's most-traded B shares to gain SKr1 to SKr22.50.

Operating margins rose from 2 per cent to 4.4 per cent. However, Leif Johansson, head of public affairs at Rolls-Royce, said of the Maybach: "It's a vote of confidence in the future of the high luxury sector by one of the world's foremost luxury carmakers, and that's got to be good for all of us."

Meanwhile, Volvo's initiative in the luxury sector will be the Z07 two-seater sports car. The vehicle uses a 5.9 litre V8 engine and is expected to cost about DM200,000 (\$112,000). Bernd Pischetsrieder, chairman, said BMW did not expect production to exceed 10,000 cars a year.

BMW also reported a rise in group sales for the nine months to September to DM43.83bn from DM37.54bn. Units sold climbed to 911,287 from 883,012.

VW announced a 8.9 per cent rise in unit sales for the first nine months, to 3.2m vehicles.

Its trucks division more than doubled operating profits from SKr413m to SKr90m, though losses continued in the US operation.

## Surge at car unit bolsters Volvo

By Greg McIvor  
in Stockholm

Volvo, the Swedish automotive group, yesterday reported a sharp improvement in underlying nine-month profits, led by a surge in earnings in its car division.

Pre-tax profits fell from SKr1.2bn to SKr10.7bn (\$1.38bn), on sales up from SKr11.6bn to SKr13.9bn, but the figures were distorted by a big non-core disposal last year.

Stripping out non-recurring items, operating profits rose from SKr1.2bn to SKr10.7bn (\$1.38bn), on sales up from SKr11.6bn to SKr13.9bn as the group benefited from favourable currency shifts and buoyant sales of its \$40/V40 model.

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## EUROPEAN NEWS DIGEST

## SCA advances to SKr3.3bn

A strong increase in volumes helped SCA, the Swedish pulp and paper group, to offset softer prices and lift nine-month profits by 28 per cent. SCA, the first of the big Nordic forestry companies to announce nine-month figures, reported a rise in pre-tax profits from SKr1.5bn to SKr3.3bn (\$430m). Excluding one-off items, underlying profits advanced 19 per cent.

The improvement confirmed a continuing upswing in the highly cyclical European forestry sector. It was driven by steady earnings growth at SCA's hygiene paper operations - its biggest division - which produces items such as nappies, tissue and incontinence products. Group turnover rose from SKr1.7bn to SKr3.5bn. The figures were in line with market expectations, and SCA's most-traded B shares eased SKr0.50 to SKr1.75.

SCA said economic trends in Europe were favourable. Demand for hygiene products was expected to remain strong, while rising industrial activity would lift corrugated board sales. Volumes increased by 9 per cent, offsetting a decline in average prices. Net earnings per share were SKr10.51, against SKr7.62. *Greg McIvor, Stockholm*

## ■ AIRCRAFT

## Dassault ahead at FF1.29bn

Dassault Aviation, the privately-controlled aircraft maker in which the French state holds 46 per cent, has reported a significant improvement in first-half income. Consolidated pre-tax attributable profits were FF1.29bn (\$21.6m). The result came on turnover up from FF1.1bn a year ago. The result came on turnover ahead a strong 46 per cent from FF1.53bn to FF1.29bn. The company said full-year 1997 turnover should reach about FF2.1bn, an improvement of more than 50 per cent on 1996; it said it had a FF1.83bn net cash position.

The group took more than FF1.9bn of orders in the first half, of which nearly half were export orders and 40 per cent from the civil aviation sector. Serge Dassault, chairman, said efforts to promote the company's new Rafale fighter had aroused the interest of several foreign air forces.

European defence industry observers are still waiting to see whether a merger between Dassault and Aerospatiale, the state-owned aerospace group, is to go ahead. The new Socialist-led government is thought to believe that Mr Dassault is unlikely to be persuaded to proceed with the merger in the short term.

*David Owen, Paris*

## ■ LUXURY GOODS

## Bally to cut 900 jobs

Bally, Switzerland's leading luxury shoe company, is cutting nearly 900 jobs, or nearly one-fifth of its workforce, in an effort to bolster profitability. Last year it made profits of SFr11m (\$7.4m) before interest and tax, on sales of about SFr1.6m. It said yesterday it expected to earn SFr15m in the current year, and SFr30m in 1998.

Bally, part of the Oerlikon-Bührle conglomerate, has been struggling for years to transform itself from a marginally profitable Swiss shoemaker into a successful global brand. However, its plans suffered a setback in August when Ernst Thomke, a well-known "company doctor", resigned as chief executive after the parent company refused to support his plans to float Bally on the stock market. Bally, which is still seeking a replacement, indicated that its promised recovery was taking longer than expected to materialise. Sales had dropped \$100m and margins had slipped by 5 per cent.

*William Hall, Schönenwerd*

## ■ SUPERMARKETS

## Casino family rift widens

The rift among members of the family defending Casino, the French supermarket group, against a hostile FF1.83bn bid by Promodes yesterday appeared to widen. Antoine Guichard, the family spokesman who favours an alternative "white knight" bid from Rallye, another supermarket group, told *Les Echos*, the daily financial newspaper, that Rallye had already beaten Promodes. "The defeat of Promodes is already mathematically guaranteed. As far as I'm concerned, it's all over," he said. He was dismissing reports that a meeting of shareholders on Saturday had failed to reach consensus on rejecting the Promodes bid. Mr Guichard said every family member in attendance on Saturday had rejected the idea of selling shares to Promodes.

However, Xavier Kemlin, a shareholder from the family group, yesterday told French radio there was considerable support for the original bid. He said: "A certain number of very important people in the family have clearly chosen Promodes."

*Agencies, Paris*

## ■ AUSTRIA

## Erste Bank seeks Sch10bn

Erste Bank, Austria's second biggest bank, plans to raise an estimated Sch10bn (\$796m) in the largest public share offering in Austrian history. The company launched a nationwide TV advertising campaign yesterday to win the support of small investors for next month's issue of 30 per cent of its shares.

It has set up a UK-style share information office and will directly mail its customers with details of the issue. Andreas Treichl, new chief executive of Erste Bank, said yesterday: "We want all Austrians to be in no doubt that the offer will retail-friendly."

Austrian investors have been starved of new equity issues for more than a year, and Erste Bank's decision to target the local retail market, rather than rely on international investors, follows evidence of heavy demand for the Sch10bn Austrian Tabak IPO, which is due to be priced next week. Creditanstalt Investment Bank,





CURRENCIES AND MONEY

# Hong Kong dollar peg gets support

## MARKETS REPORT

By Richard Adams

The Hong Kong dollar was caught in the cross-fire of a stronger US dollar and a weakening equities market yesterday, after the southeast Asian currency turmoil continued to cause problems.

The Hong Kong dollar, which is pegged to the US dollar, had another bruising day. Only large-scale intervention by the Hong Kong monetary authority kept the dollar above the floor of its peg. But London analysts warned that the effort required to maintain the peg would hurt property and equity prices in Hong Kong.

The Hong Kong currency closed in London at HK\$7.7495 - above the peg's floor of HK\$7.80, but only a sliver above the monetary authority's intervention level of HK\$7.75.

Hedge funds are said to have taken positions against

the Hong Kong dollar, selling the currency in forward markets to buy US dollars.

The one-year forward rate rose to HK\$8.15 against the US dollar, not far off the Chinese yuan's rate of Yn8.28.

A severe lack of liquidity in the Hong Kong dollar has restricted the operations of the short funds, who are likely to switch their focus to Hong Kong futures.

Elsewhere, the Thai baht touched a record low against the US dollar, as political jitters continued in the absence of the appointment of a new finance minister in Thailand. Australian dollar also lost ground, through suspicions of interest rate cuts to come.

The US dollar's fundamentals helped it make gains in

■ POUND SPOT FORWARD AGAINST THE POUND

Oct 22 Closing bid/ask Change on day Bid/offer spread Day's mid high low One month Rate %PA Three months Rate %PA One year Rate %PA Bank of England Index

Europe

Austria (Sch) 20,5000 -0.04 903 -115 20,5784 20,4695 20,4465 3.2 20,3338 3.2 19,2284 3.3 10,23

Belgium (Bfr) 80,0000 -0.04 903 -115 60,2900 59,8820 59,8507 3.0 58,4687 3.0 57,7377 3.0 10,18

France (Fr) 1,0000 -0.04 903 -115 1,0000 1,0000 1,0000 3.4 1,0004 3.4 1,0008 3.4 1,0000

Finland (Fmk) 8,7728 -0,0171 906 -202 8,7495 8,7495 8,7495 3.4 8,7491 3.4 8,7474 3.4 8,7424

Germany (Dm) 7,7258 -0,0114 583 -872 8,0226 8,7485 8,7298 3.0 8,7401 3.0 8,7392 3.0 8,7298

Greece (Dr) 456,19 -0,743 927 175 -204 458,431 455,531 457,932 3.9 458,431 3.9 458,431 3.9 458,431

Ireland (E) 1,1100 -0,0032 102 -342 1,1210 1,1141 1,1185 0,5 1,1171 0,5 1,1108 0,5 1,1171

Italy (I) 2,2808 -1,198 240 457 2,2808 2,2812 2,2812 3.0 2,2832 3.0 2,2820 3.0 2,2812

Netherlands (Fl) 1,0256 -0,0026 102 -342 1,0256 1,0256 1,0256 3.0 1,0256 3.0 1,0256 3.0 1,0256

Norway (Nkr) 3,2954 -0,0111 119 -233 3,18857 3,18857 3,18857 3.0 3,18857 3.0 3,18857 3.0 3,18857

Portugal (Ps) 206,733 -0,103 467 007 207,206 205,205 205,205 3.0 206,733 3.0 206,733 3.0 206,733

Spain (Pta) 245,561 -0,533 535 -767 246,282 245,110 245,216 2.1 244,244 2.1 244,244 2.1 244,244

Sweden (Skk) 12,5473 -0,0203 577 -552 12,8120 12,5346 12,5198 2.6 12,6153 2.6 12,2048 2.7 12,6153

Switzerland (Fr) -0,0138 104 -152 2,4336 2,4090 2,4011 5.4 2,3785 5.4 2,2762 5.5 105,4

UK (P) -1,4770 -0,0010 758 -782 1,4610 1,4752 1,4737 2.7 1,4698 2.8 1,4535 3.0 1,4698

SDR (-) -1,02490 -0,0010 758 -782 1,4610 1,4752 1,4737 2.7 1,4698 2.8 1,4535 3.0 1,4698

Americas

Argentina (Peso) 1,6548 +0,002 342 -333 1,6368 1,6273 - - - - - -

Brazil (R) 1,7903 +0,0113 958 -900 1,801 -1,7889 - - - - - -

Canada (Cs) 2,2747 +0,0038 728 -758 2,2761 2,2835 2,2879 3.5 2,2542 3.6 2,2033 3.1 2,2032

Mexico (New Peso) 12,6220 -0,0108 102 -342 12,6220 12,5676 12,5676 3.0 12,6220 3.0 12,6220 3.0 12,6220

Pacific/Middle East/Africa

Australia (A\$) 2,3164 -0,0067 149 -179 2,1813 2,2763 2,2118 2.4 2,2008 2.3 2,2002 2.3 2,2002

Hong Kong (HK\$) 12,6704 -0,0227 657 751 12,8889 12,6135 12,7103 -2.6 12,7285 -2.6 12,6846 -2.6 12,7285

India (Rs) 50,1623 -0,125 280 -993 60,2410 59,8990 59,8577 -4.0 50,7593 -4.0 51,436 -3.8 -

Israel (NIS) 3,7869 +0,0025 794 -900 5,7598 5,7740 - - - - - -

Japan (Y) 197,20 +0,48 186 -421 197,040 196,114 191,72 193,054 88,14 194,434 85 127,5

Malaysia (M\$) 5,5561 +0,1018 444 -524 5,6295 5,4453 5,5581 -0.8 5,5581 -0.8 5,5581 -0.8 5,5581

New Zealand (NZ\$) 2,6054 +0,0451 635 -072 2,6064 2,5955 2,5981 -0.3 2,6074 -0.3 2,6125 -0.3 2,6125

Philippines (Peso) 1,6550 +0,0001 345 -355 1,6570 1,6575 1,6522 -1.8 1,6522 -1.8 1,6522 -1.8 1,6522

Saudi Arabia (Sr) 6,1328 +0,0007 302 -343 6,1384 6,1051 6,1244 1.5 6,1111 1.4 6,0961 1.2 -

Singapore (S\$) 2,5898 +0,0125 974 -923 2,5953 2,5713 2,5575 1.4 2,5755 1.4 2,5373 2.0 2,5373

South Africa (R) 7,7123 +0,0317 971 -171 7,7179 7,6962 7,7065 -4.2 7,8071 -7.5 7,8207 -6.7

South Korea (Won) 147,01 -0,146 573 -821 149,080 148,000 148,000 3.0 149,080 3.0 149,080 3.0 149,080

Taiwan (T\$) 49,4170 -0,0747 619 -73 49,8837 49,2316 49,3671 1.2 49,2858 1.1 49,0545 0.9 -

Thailand (Bt) 62,1626 -0,0891 927 367 62,1650 62,1650 62,1650 0.0 62,0835 -0.5 62,0835 -0.5 62,0835

Yuan (CNY) 7,5082 -0,621 4948 1,476 1,476 1,476 1,476 1,476 1,476 1,476 1,476 1,476 1,476

Euro (EUR) 10,54 7,5082 8,6100 1,372 7,738 7,2223 7,2223 8,002 20,08 1,683 8,6100 1,077 1,077 1,077

Dollar (USD) 10,54 7,5082 8,6100 1,372 7,738 7,2223 7,2223 8,002 20,08 1,683 8,6100 1,077 1,077 1,077

Deutsche Mark (DM) 125,000 per DM

Open Latest High Low Bid/offer spread Day's mid high low One month Rate %PA Three months Rate %PA One year Rate %PA Bank of England Index

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## COMMODITIES AND AGRICULTURE

## Saudi Arabia to focus on natural gas

By Robert Corzine  
in Riyadh

Saudi Arabia, holder of the world's largest oil reserves, yesterday said it would focus future exploration efforts on natural gas in order to meet surging domestic demand.

A senior official at the Petroleum Ministry in Riyadh said the more extensive use of gas in the kingdom could free up between 200,000 and 300,000 barrels a day of additional crude oil for export within two years. Saudi Arabia currently burns crude oil in a number of power stations and desalination plants.

The official said any increase in crude exports as a result of fuel substitution within the kingdom would not breach the country's 8m b/d quota from the Organisation of Petroleum Exporting Countries.

"It's a cheap way of adding to crude exports," he said. But additional sales would only be made if the market allows for this volume to come forth.

Some studies suggest Saudi Arabia loses as much as \$1.3bn a year in lost export revenues as a result of burning more than 230,000 barrels of crude a day for power generation, water desalination and other industrial purposes.

Nearly 50,000 barrels a day of diesel are also consumed domestically for similar purposes. The use of crude for power generation is also more costly than cleaner-burning gas, because oil-fired turbines require more maintenance and are more prone to breakdowns.

The expected boost in crude oil exports as a result of domestic fuel switching will also help offset a predicted reduction over the long term in Saudi exports of liquefied petroleum gas as a result of growing domestic demand for LPG.

Earlier this week Ali Al-Naimi, the petroleum minister, ruled out foreign companies taking a direct

role in the exploration and development of Saudi Arabia's gas reserves. Yesterday he said a recently announced price increase for domestic gas - from 50 US cents per million British Thermal Units to 75 cents per million BTU - was a sufficient incentive for Saudi Aramco, the state petroleum company, to boost its gas activities.

The new price was "quite positive", but the official suggested Aramco will be cautious in assessing demand. Demand for gas is forecast to double by 2010 to around 75bn cubic meters a year, "but we should not assume all the demand potential will be realised".

## COMMODITIES NEWS DIGEST

## Australian coal industry under fire

Productivity at Australian coal mines is up to 37 per cent below that in the US, hampered by high staffing, low equipment utilisation and geological differences, according to a study commissioned by Rio Tinto, the world's biggest mining group. Leigh Clifford, chief executive of energy at Rio Tinto, said the study raised serious concerns about the future of Australia's black coal industry if reform did not take place. "There is a hell of a scope for improvement," he added.

The findings by Tasman Asia Pacific from 27 mine operations in Australia, Asia and the US point in particular to poor labour productivity. It says shift patterns in Australian coal mines cause almost double the level of idle time than in US mines, where longer shifts lead to fewer change-overs. The industry in Australia has been hurt by disputes - last year the number of days lost was 45 times the rate of all other industries.

Rio Tinto said it would conduct a secret ballot on the terms of a collective agreement. It said that although the report was grim reading, it highlighted the necessity for change. "It should be good news if we can get change implemented in the coal industry, it should generate more investment and create more jobs," the company said.

John Maitland, president of the miners' union, dismissed the study as propaganda and said other companies in the coal industry were conducting their own benchmarking exercises.

Australia is the largest exporter of coal in the world; although it produces only 5 per cent of world output, coal exports represent 8 per cent of the country's shipments. In 1996, some 138m tonnes were exported, generating sales of \$A7.8bn. Its main competitors are the US, South Africa and Canada, although low-wage operations in China and Indonesia are also applying pressure.

Elizabeth Robinson, Sydney

## Oil rallies on fall in stocks

## MARKETS REPORT

By Gary Mead

World oil futures rallied yesterday in the wake of data showing an unexpected drop in crude oil stocks. Cold weather in the US added to the bullish mood.

The American Petroleum Institute and the US Department of Energy both reported falls of more than 3.3m barrels in US stocks held in primary storage.

On the New York Mercantile Exchange, the benchmark December contract was up 54 cents at \$21.40 a barrel in early trading. On London's International Petroleum Exchange, the December Brent crude contract rose 53 cents to \$20.28 in late trading.

There were mixed fortunes for cocoa and coffee on the London International Financial Futures Exchange. Cocoa took more pounding from investment fund sellers, while coffee mounted a recovery as industry buyers began to sense bargains.

Investors continued to shy away from cocoa, convinced that global production levels in the medium-term augur poorly for significant price

jumps. The December contract slid rapidly, touching a low of \$1,057 a tonne. It later recovered and finished at \$1,067 a tonne, \$3 lower than the previous close.

Almost all the gains made in August and September - inspired by fears that the latest El Nino weather pattern would damage crops - have now been obliterated in a three-day purge. Increasingly favourable news concerning the crop from the Ivory Coast, the world's biggest producer of cocoa beans, has diminished fears about the periodic warming of the tropical Pacific Ocean that reverberates globally.

On New York's Coffee, Sugar and Cocoa Exchange there was less of a slide in cocoa futures as fund sellers balanced renewed manufacturer buying, the benchmark December contract was down just \$1 at \$1,582 a tonne in morning trading.

Coffee attracted trade buyers and speculators covering short positions, and together they restored some of the previous collapse that brought it to a two-month low of \$1,455 on Tuesday; the January contract closed \$5 higher at \$1,513 a tonne on the CSCE.

By Gary Mead

World sugar production is forecast to reach near-record levels in 1997-98, with strong performances from the European Union and Brazil - still the world's biggest individual producer - more than compensating for decreased crops in eastern Europe, Thailand, India and Cuba.

According to figures published today by E.D. & F. Man, total world raw sugar production will rise by 578,000 tonnes to 123.6m tonnes in 1997-98, marginally below the record 1995-96 figure of 123.66m tonnes.

With global raw sugar consumption forecast by E.D. & F. Man to increase by another 2 per cent, to 123.16 tonnes (the bulk of the increase being in Asia and the Americas) the projected 1997-98 surplus of production over consumption stands at 432,000 tonnes, the tightest balance for four seasons.

However, the report points out that with considerable stock reduction expected (particularly in India) this apparent global physical tightness is somewhat illusory. But analysts concur that India could move into net deficit in 1998-99, as more reserves are sold and farmers continue to move away from sugar production into alternative crops.



Ashley Ashwood

Harvesting cane in Brazil, still the world's biggest producer

The EU in particular has enjoyed "near perfect growing conditions" this season, promising a white sugar yield of 17.4m tonnes, an increase of 940,000 tonnes, France - the world's biggest sugar beet producer - has had to extend its harvesting period by at least a week to cope with the large volume of beets.

But some leading cane producers, Thailand in particular, are faring less well. Thailand's Cane and Sugar Board has again lowered projections for cane production for 1997-98, to 44.56m tonnes from the 59.04m tonnes forecast earlier this year.

Blame is pinned on insufficient rain caused by the current El Nino weather system - a periodic warming of the tropical Pacific Ocean by a few degrees that reverberates globally.

The El Nino factor is... more likely to have an even greater part to play in the supply/demand equation

towards the end of the 1997-98 and through to the first half of the 1998-99 season," says E.D. & F. Man.

Bumper crops in the EU and elsewhere have largely been discounted in prices.

A big sell-off by investment funds in early October saw speculative "long" positions - hets that prices would rise, partly on premature anticipation of the effects of El Nino - on New York's Coffee, Sugar and Cocoa Exchange reduced from more than 100,000 contracts to about 35,000.

That knocked the October future below the important 11 cents barrier to 10.60 cents a pound, though there has since been a small rally, with the March future at 11.76 cents yesterday.

## EUROPEAN ALUMINIUM

## Federation warns on energy tax

The European aluminium industry would be badly damaged if energy taxation was introduced at the rates proposed by the European Commission, warned John Spiers, president of the UK Aluminium Federation (Alfed), last night. Aluminium smelting in the UK would have to close down with the loss of 1,300 direct and 5,000 indirect jobs.

There would be a loss of 238,000 tonnes of annual primary aluminium production at four plants in Scotland, Wales and Northumberland and a balance of payments deficit of £238m for the UK economy.

This was the key message the federation would be communicating to UK members of the European parliament in two weeks time, Mr Spiers said at Alfed's annual dinner. It would argue that the aluminium industry should be exempt from any energy taxation, he said.

In a briefing paper, the federation suggests the EU aluminium industry already bears a high cost for environmental protection equipment in order to comply with legislation which is generally the most stringent in the world. "Very efficient UK smelters would close and inefficient polluting smelters in other parts of the world would flourish. The net result would be a worse environmental situation on a global scale."

Kenneth Gooding

## COMMODITIES PRICES

## BASIC METALS

## LONDON METAL EXCHANGE

(Prices from Anticipated Metal Trading)

## ■ ALUMINUM, 99.7% (\$ per tonne)

Closes 1565-8 1564-5 Previous 1576-77 1604-05 High/low 1602/1599 AM Official 1566-66 1564-95 Kerb close 1566-7 Total daily turnover 223,827 Open Int. 114,725 Total daily turnover 114,725

## ■ ALUMINUM ALLOY (\$ per tonne)

Closes 1440-45 1462-3 Previous 1430-35 1460-63 High/low 1468/1455 AM Official 1435-40 1450-50 Kerb close 1460-54 Open Int. 5,149 Total daily turnover 2,833

## ■ LEAD (\$ per tonne)

Closes 612,50-55 625-6 Previous 598-600 611-2 High/low 600/613 AM Official 606-7 619-9 Kerb close 625-7 Open Int. 21,398 Total daily turnover 6,366

## ■ NICKEL (\$ per tonne)

Closes 6390-400 6400-00 Previous 6390-70 6400-35 High/low 6500/6430 AM Official 6350-65 6435-40 Kerb close 6435-55 Open Int. 54,461 Total daily turnover 19,416

## ■ TIN (\$ per tonne)

Closes 5425-35 5450-55 Previous 53675-70 5410-15 High/low 5500/5430 AM Official 5415-25 5440-50 Kerb close 5430-55 Open Int. 15,875 Total daily turnover 7,295

## ■ ZINC, special high grade (\$ per tonne)

Closes 1254-35 1275-6 Previous 1250-61 1271/1273 High/low 1261/1273 AM Official 1254-54 1275-73 Kerb close 1274-5 Open Int. 79,777 Total daily turnover 18,061

## ■ COPPER, grade A (\$ per tonne)

Closes 2084-5 2108-7 Previous 2089-70 2108/2081 High/low 2108/2107 AM Official 2065-66 2101-2 Kerb close 2101-2 Open Int. 146,492 Total daily turnover 52,872

## ■ LME Closing S&amp;P rates (\$ per tonne)

Closes 1,591-1,592 Previous 1,589-1,593 High/low 1,590/1,594 AM Official 1,585-1,586 Kerb close 1,585-1,587 Open Int. 1,585-1,588 Total daily turnover 1,585-1,589

## ■ CRUDE OIL, NYMEX (\$/bbl)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ ENERGY

## ■ CRUDE OIL, NYMEX (1,000 barrels/bbl)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ HEATING OIL, NYMEX (\$/bbl)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ GOLD, COMEX (\$/oz)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ HIGH GRADE COPPER (COMEX)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ IRON OXIDE, LME (\$/tonne)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ IRON OXIDE, NYMEX (\$/tonne)

Latest Day's High 100.00 Low 98.00 Open 98.00 Price Change High 100.00 Low 98.00 Vol. 1,000 Int. 100.00

## ■ IRON OXIDE, LME (\$/tonne)

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## ■ IRON OXIDE, NYMEX (\$/tonne)



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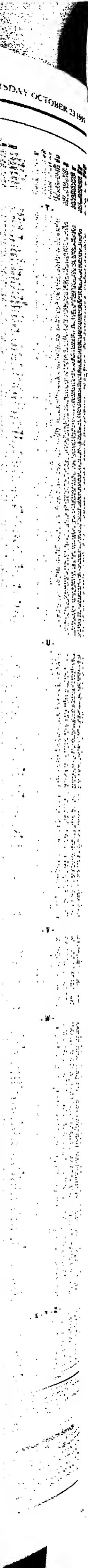
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Barclays Global Fund									
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## FINANCIAL TIMES SURVEY

## THE NETHERLANDS

Prime Minister Wim Kok's flexible workforce has been described as 'eloquent' and now others are copying it, reports Gordon Cramb

## Plaudits for the Dutch model

**I**t reverberated as a death knell for the Netherlands' paternalist employment traditions. Wim Kok, the former union leader who for the past three years has led a modernising left-liberal government, stood on a conference platform in the seaside town Scheveningen this month and said: "The job for life belongs to the past."

He was really only acknowledging reality. Well over a third of the workforce - the highest proportion in the industrialised world - is on part-time, temporary or otherwise flexible contracts which guarantee no such thing. Philips, the electronics manufacturer which is one of the country's top employers, had just made clear that time-servers among its 40,000 Dutch-based staff would have to move on within the group, or move out.

Yet the fact that the prime minister felt able to make such a pronouncement within months of a general election is testimony not only to the security of his own popularity, but to the changes in socio-economic life he has wrought. Mr Kok predicts that his government will have presided over the creation of half a million jobs by the time its current term ends next May.

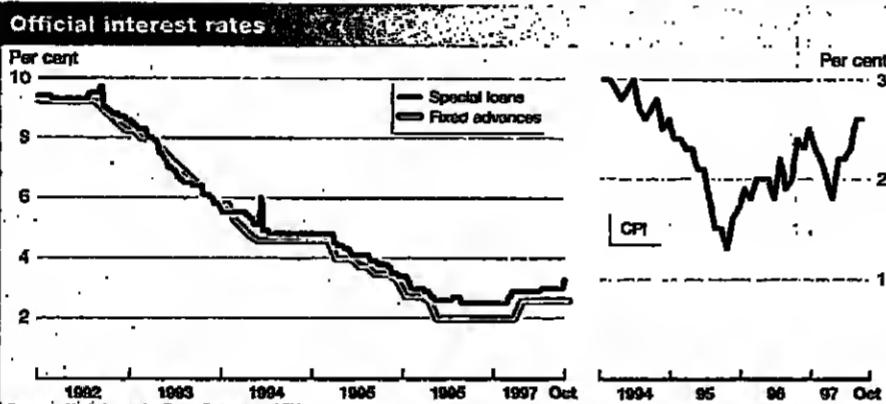
He had a fair basis on which to build. Centuries of Dutch entrepreneurialism gained a country with only 15.5m people its place as the world's seventh largest exporter of goods and services. While the fruits of success in global markets were for decades sapped by a thirsty welfare system, its latest turnaround is commonly traced to a wage restraint accord struck as long as 15 years ago.

Those were the dark hours. National income declined for eight successive quarters. One in every 25 manufacturers went bankrupt. Ruud Lubbers, the Christian democrat premier of the time, recalls: "The jobless total was rising by 15,000 a month - that was the driving force."

Around a kitchen table in Wassenaar, a leafy commuter village near The Hague, employers and unions in 1982 agreed a deal whereby pay demands would be moderated in return for job preservation, a shorter working week and consensus on preserving the main social security pillars. Kitty Rozenmund, deputy chairwoman of the FNV, the country's largest union grouping, describes it as a



Amsterdam has enjoyed growth without "a masterplan or a grand design" Photo: Leida van der Meijer



Source: Nederlandsche Bank; Datastream/ICV

"trade-off for greater security and more co-determination." The FNV hose at that table was Wim Kok.

Reforms of state finances under his government have halved the public sector deficit to stand at just 2 per cent of gross domestic product - the lowest since 1978 - with a further decline to 1.7 per cent projected for next year. Gross public debt will have fallen from 75 per cent to close to 70 per cent. Government expenditures are to absorb only half of GDP next year, down from 56 per cent in 1994.

Growth this year will be the strongest since 1990, in the economy as a whole and in employment. On the external front the Netherlands will have a current account surplus which as a percentage of GDP is the highest since 1963.

Data such as that have brought international plaudits for The Hague in recent months. A Dutch miracle, it has been called. The Dutch model, even the "polder model", a term derived from the raised 'tracts of land forming much of the

country, built in a co-operative effort to stem the tide.

France and Italy are taking up the idea that a cut in working hours can reduce overall unemployment rates. Jacques Santer, European Commission president, described as "eloquent" the country's example in reducing the indirect costs of labour by 2.5 per cent of GDP since 1985. In Germany, much attention has centred on the trust established among the Dutch "social partners". No western country loses proportionately fewer days to strikes. And real wages are below the levels of 1980.

Miracle yes; model no, says Jelle Visser, of the school for social research at the University of Amsterdam and Germany's Max Planck Institute. Annual jobs growth of 1.6 per cent is four times the EU average and "over 15 years has been as good as the American jobs machine, but without the sharp increases in inequality" seen the other side of the Atlantic, he maintains.

Stricter screening means many of those who before were conveniently classified as disabled - a category which by itself reached at one stage nearly 10 per cent of the workforce - are having to find jobs. But unofficial estimates say that to the registered unemployment rate, which at an

expected 5.75 per cent this year is among the lowest in the European Union, still has to be added perhaps a further 15 per cent of the working age population which is drawing some other form of pre-pension benefit.

Still, the ratio of economically inactive Dutch supported by those in work has come down to 78 per cent from a previous level stuck at around 83 per cent. And McKinsey, the international management consultancy, says: "The greatest threat to further economic growth in the Netherlands is complacency with what has already been achieved."

In a report last month it enumerates areas ripe for improvement, from procedures for designating land use to issues of corporate governance, where in each case restrictions apply which look increasingly out of line with international practice. Gerrit Zalm, finance minister, says efforts by the Dutch quoted sector to improve transparency and shareholder accountability have not gone far enough.

Competition policy has recently received government attention, and a law to limit cartels and restrictive practices comes into force from next January. But there is to be no monopolies commission, exemptions are already being handed out to sectors such as publishing, and regulators in newly liberalised industries are beginning to chafe at the narrowness of their remit.

The government showed its internationalist credentials by appointing Jens Arnbak, a Danish academic, as first chairman of Opta, the telecoms watchdog. But Mr Arnbak says: "Big gaps are emerging between the legal competencies of regulators in adjacent areas, especially where these relate to new developments such as the internet." KPN, the privatised posts and telecoms utility, is fighting hard to gain a presence in that medium, and there is no one empowered to adjudicate on all the complaints of the myriad small rivals it may drown in the process.

Of broader concern is the warning by Hans Melkert, chairman of the VNO-NCW employers' association, that the state is creating new rigidities in requiring all but the tiniest companies to engage a health and safety consultancy from next year.

Hague policymakers question some of the assumptions which led McKinsey to conclude that the removal of domestic regulatory barriers

■ Area: 41,926 sq km  
■ Languages: Dutch  
■ Population: 15,957,000 (May 31 1997)

■ Urban districts and populations  
Largest 10 cities  
Amsterdam (capital) 1,102,000  
Rotterdam 1,077,000  
The Hague 686,000  
Utrecht 548,000  
Eindhoven 394,000  
Arnhem 311,000

■ Exchange rate: Guilder (F) = 100 cents  
October 16 1997 \$1 = F 1.9563

■ Constitution  
■ Form of state: Constitutional monarchy

■ National legislature: Bicameral State General (parliament): First Chamber (Senate) of 75 members elected by Provincial States (regional parliamentary assembly); Second Chamber of 150 members directly elected for a four-year term. The First Chamber may only approve or reject bills and may not initiate or amend them

■ Electoral system: Universal direct suffrage over the age of 18. The whole country forms a single constituency and the Second Chamber is elected by the d'Hondt system of proportional representation

■ National elections: May 3 1994; next election due by May 1998

■ Head of state: Queen Beatrix, accessed to throne 1980

■ State legislatures: Twelve directly elected Provincial States responsible for electing the First Chamber of the State General and overseeing regional government. They also have the power to raise some regional taxes. The governing executive is called the Deputy State and is elected by each Provincial State but presided over by a commissioner appointed by the Crown

■ National government: Council of Ministers, headed by the prime minister, responsible to the State General

■ Ministers: Elected by the members of the House of Representatives

■ Political parties: PvdA; Christian Democratic Appeal (CDA); People's Party for Freedom and Democracy (Liberals-VVD); Democrats 66 (D66); Green Left Alliance; Political Reformed Party (SGP); Reformed Political Federation (RPF); Centre Democrats (CD); Socialist Party

■ Main political organisations:

Labour (PvdA); Christian Democratic Appeal (CDA); People's Party for Freedom and Democracy (Liberals-VVD); Democrats 66 (D66); Green Left Alliance; Political Reformed Party (SGP); Reformed Political Federation (RPF); Centre Democrats (CD); Socialist Party

■ Economic summary

1997 1996

Total GDP, nominal (\$bn) 368.7 413.8

Real GDP growth (annual % change) 2.7 3.0

GDP per head (\$) 23,570 26,460

Inflation (annual % change in CPI) 2.3 2.2

Wage rates (annual % change) 2.5 3.0

Industrial production (annual % change) 3.7 3.3

Unemployment rate (% of workforce) 5.8 5.7

Broad money (annual % change) 5.0 4.9

Three month interest rate, year end (%) 3.1 3.5

Long bond yield, year end (%) 5.80 5.75

Budget balance (% of GDP) 74.9 72.9

Government debt (% of GDP) 9.0 12.8

Current account balance (\$bn) 17.1 22.8

Merchandise exports (\$bn) 214.5 247.2

Merchandise imports (\$bn) -193.8 -220.2

Trade balance (\$bn) 20.7 27.0

■ Main trading partners (share of total trade to world, 1996)

EU 15 64.2%

Germany 22.4%

Belg-Lux 11.2%

Exports 13.2% France 7.4%

UK 0.6% Imports 10.0%

Source: Ing Barings, EU, Datastream/ICV



	1997	1996
Total GDP, nominal (\$bn)	368.7	413.8
Real GDP growth (annual % change)	2.7	3.0
GDP per head (\$)	23,570	26,460
Inflation (annual % change in CPI)	2.3	2.2
Wage rates (annual % change)	2.5	3.0
Industrial production (annual % change)	3.7	3.3
Unemployment rate (% of workforce)	5.8	5.7
Broad money (annual % change)	5.0	4.9
Three month interest rate, year end (%)	3.1	3.5
Long bond yield, year end (%)	5.80	5.75
Budget balance (% of GDP)	74.9	72.9
Government debt (% of GDP)	9.0	12.8
Current account balance (\$bn)	17.1	22.8
Merchandise exports (\$bn)	214.5	247.2
Merchandise imports (\$bn)	-193.8	-220.2
Trade balance (\$bn)	20.7	27.0

could yield an extra 1m jobs over a decade. But the close-up sectoral analyses

carried out by the management consultants, and in a separate work last month by the government's own forecasters, are seized on by an administration which micro-manages with almost Singaporian zeal.

And the government budget for next year provides a subsidy so that, for a competitive F1 17.50 an hour to the consumer, some of the unemployed can become household cleaners.

They will join some 40,000 subsidised jobs being generated by the end of 1998 in private sector as well as local authority positions.

Rembrandt's Night Watch again forms a civilian guard on the streets of Amsterdam, backed by central funds in a programme initiated by Ad Melkert, employment minister.

As few as 2 per cent a year of those in so-called Melkert jobs make the leap to commercial posts. For the rest, the extent to which their functions replace paid work which would anyway be available has yet to be quantified.

Even outside the Melkert mechanism, employment creation is occurring mainly at the bottom end of the skills scale. Eight out of 10 new jobs are in services or the public sector. Some do little more than shift a benefit recipient out of official

unemployment data.

Even that does not make the picture look entirely rosy - as few as a quarter of the jobs lost since the 1970s have since been recovered. In most respects the Netherlands has been engaged in a catching-up exercise. This is in large measure acknowledged by Mr Kok, who said on budget day: "We have come a long way; we have a long way to go."

For all the "miracle" gross domestic product per capita comes in halfway down the western European league. And the question is whether any further progress through those ranks can be made at a time when economic and monetary union will further limit policy differentiation from its neighbours.

Nout Wellink, new governor of the central bank, showed his colours this month by increasing interest rates more than the latest signal from Frankfurt required, and is concerned that The Hague coalition is not cutting the deficit

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POLITICS • by Gordon Cramb

## Telling time for coalition



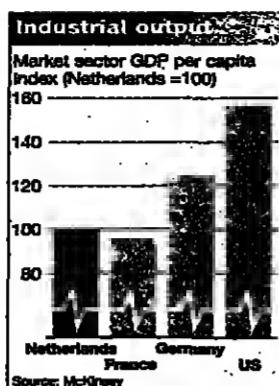
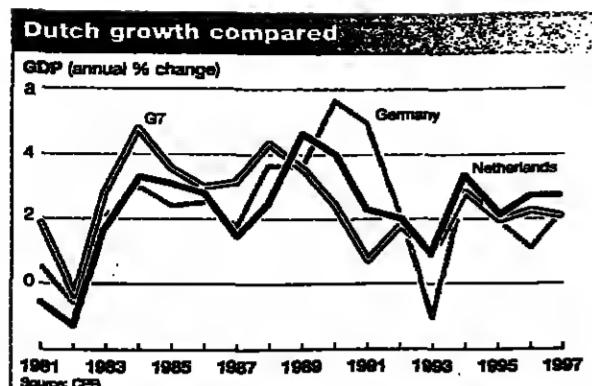
Wim Kok's (left) PvdA is likely to add to its 37 MPs in the election but VVD led by Frits Bolkestein, the prominent Eurosceptic, is on course to increase its representation from 31

to 40 seats in the 150-member lower house. The free-market liberal VVD was just behind with 40 seats, but in soundings earlier this year had been leading the popularity rankings.

Either way, the VVD is on course to increase its representation from the 31 seats it holds in the current parliament. While Mr Kok's party will on present form also add to its 37 MPs, it can no longer be assured of pre-eminence. That is important in a country where government by coalition is the norm, and where the leader of the largest party in any such grouping is by tradition given the premiership.

Second, the contest will be the first for half a century in which the Christian democrats fight as opposition

## 2 THE NETHERLANDS



ECONOMY • by Gordon Cramb

## Battening down the hatches

The government is insulating its successes against the next downturn

Partly in pride and partly warning of a fall, Gerrit Zalm, finance minister, acknowledged in presenting his 1998 budget last month: "It will be unique in history if growth continues for eight years."

The Netherlands escaped the last European recession. By nearly all measures it is now riding high. A government which has had an easy economic run since it took office in 1994 wishes to insulate its successes against the next downturn. Part of that involves preparing the public for a change in the business cycle. At the same time it is seeking re-election for another four-year term next May.

Mr Zalm dealt with these conflicting pressures by paying out more than had been expected. The budget profited F1.3bn net cuts in tax and social security charges, equivalent to some 0.5 per cent of gross domestic product.

Economists dispute that such stimuli are justified for a country forecast to enjoy a third successive year of growth higher than 3 per cent - and where inflation at above 2.5 per cent is the highest in the European Union after Greece. Producer price increases are running ahead of 4 per cent year-on-year.

Non Wellink, new governor of the central bank, this month made clear not only his concerns, but his intention to do something about them. In his first action since he inherited the job from the long-serving Wim Duisenberg - now in Frankfurt to oversee the EU's move to economic and monetary union - Mr Wellink ordered a rise in official interest rates.

He took his cue from the German Bundesbank, but went further. Not only did the special loans rate rise in line with the Bundesbank's repurchase rate for money market activities - an increase necessary to defend the guilder's value against the D-Mark to which it is pegged.

But the Nederlandse Bank said that "considering the development of the domestic economy" it would also add a quarter point to its fixed advances rate, the equivalent of the Frankfurt discount rate which had for the moment been left unchanged.

Ministers insist there are no signs of overheating. The central bank accepts that

inflation has been largely driven by a rise in the dollar and sterling which halted in August. And fears of an asset price bubble eased when the Dutch stock market underwent a summer correction, after a year of setting records fuelled by private investor enthusiasm.

But other warning signals remain, such as residential property values - some Amsterdam apartments have nearly trebled in price over five years. That has brought a welter of remortgaging as owners extract capital from their homes. Statistica Netherlands estimates that F1.21bn was converted last year from bricks and mortar into consumption spending, and that 40 per cent of new home loans in the first six

months of 1997 were remortgaged.

Growth for the past year has been consumer-led. Exports, the traditional motor of the Dutch economy, are expected to resume that role for 1998, when official predictions say real GDP should increase 3.75 per cent. In its latest quarterly report, produced just after the budget, the central bank says that capacity utilisation continues to rise and that "monetary developments in the Netherlands remain expansionary."

Hans Blankert, chairman of the VNO-NCW employers' federation, made his, in part successful, pitch for business tax concessions in the budget by producing evidence that earnings growth was currently based on bigger volumes rather than better margins. If these became squeezed, the corporate sector would be extra-vulnerable.

He also struck a chord in The Hague with a warning about skills shortages, and a government action plan to address vocational training is due by the end of the year.

## PROFILE

## Internet services

## Liberalisation allows more traffic on to superhighway

As 150 or so competitors make strides, KPN is making a robust challenge

Liberalisation of the Dutch telecommunications market this year has brought benefits for the 150 or so companies offering internet access in the country -- and a robust challenge from KPN, the privatised former monopoly, for a share in those revenues.

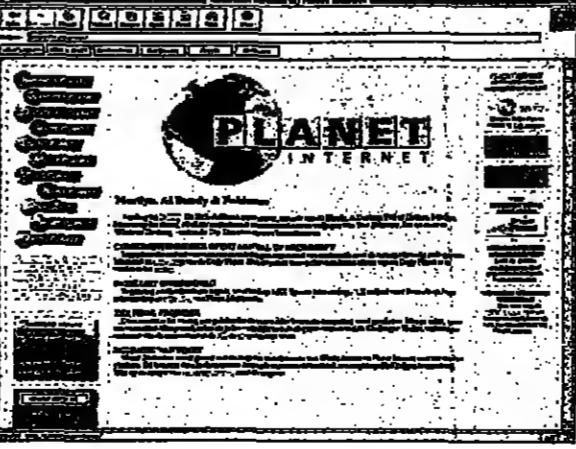
From July KPN had to cede its sole right to supply basic voice services to consumers: its hold over business and data traffic was removed earlier. The company is seeking ways to replace lost income for a telecoms division which is intended next year to gain a separate bourse listing.

PTT Post, the mail side from which it is being split, acted to secure its future with the purchase last year

familiarity with English as well as with software programs.

Fine for the young, urban and multilingual, it was thought. Planet Internet had already made a mark with Dutch-language editorial content, some of which is kept proprietary for its customers. The reach needed to be extended, though, if KPN was to increase call activity on its domestic lines, to establish a brokering role in electronic commerce -- and to claim a place in the market for internet telephony itself, if technological improvements mean, as the company suspects, that the internet soon becomes a challenger to traditional telephone companies in standard long-distance calls.

"We have to lower all the barriers there are," says KPN, which had just acquired majority holdings in Planet Internet and World Access, two of the country's biggest internet service providers (ISPs). But these, like their peers, offered access to a world in which users needed



mainly offering versions of what they already had on the Web. Still, an informal poll of 900 readers of Planet Multimedia, an online Planet Internet magazine accessible to customers of other ISPs, suggested a quarter would take a F1.5 a month subscription to Het Net as well.

Some 60 leading local companies signed up for sites, the responses of most

were disparaging, however. "I already have the Yellow Pages," said one. Another read: "Surfing Het Net is like driving a car with the steering lock on." While seasoned internet users are not the target market for the service, the publication of their reactions by Planet Internet demonstrates an independent-minded approach to what will become its new role as a provider of online content within PTT Telecom. Its subscribers' connections are being switched over to World Access.

"It is important for our public credibility to be critical of activities whether they concern the PTT or other telecommunications operators," says Planet.

Other ISPs are critical of PTT Telecom, not so much for its keenness to secure a place in their sector but for the service it offers them as wholesale customers. Among the most valued of these are "virtual points of presence" -- the ability to offer internet

hookups at a local call tariff without physically putting modems and switchgear in every dialling district in the country. According to Nick Reid, overseas development manager of the UK's Demon Internet, KPN sales staff promised this but then withdrew.

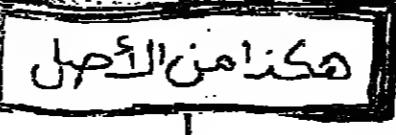
"My feeling is that it was intentional," he says. "The senior management may have said, why should we help these people?" Nearly a year behind schedule, the service will become available as a result of a deal with Eneritel, a consortium grouping Dutch energy and cable television companies which is building one of two new national infrastructures for telecoms. Telfort, the rival venture grouping BT of the UK and the Dutch national railways, was slightly slower off the mark.

The Netherlands is Demon's first foreign market. Its arrival forms part of an internationalisation of the ISP sector which last month

saw NLnet, one of the biggest, snapped up by WorldCom of the US, owner of UUnet and recent bidder for MCI. BT, its antagonist in that contest, through Telfort owns a minority share in another, WorldOnline Europe, Net, also an established Dutch provider, in May took over Infoboard in Belgium. None employs more than about 150 staff in the Netherlands. Yet these are all new jobs, and created in part because the country is extending into cyberspace its traditional role as an entrepot nation -- the Amsterdam Internet exchange, where providers trade spare capacity, is shaping up to be among the world's largest.

None set up in the city for that reason, only later deciding to seek a domestic customer base. High-level technicians it has had to import because of a lack of the suitably skilled local applicants it would prefer.

Gordon Cramb

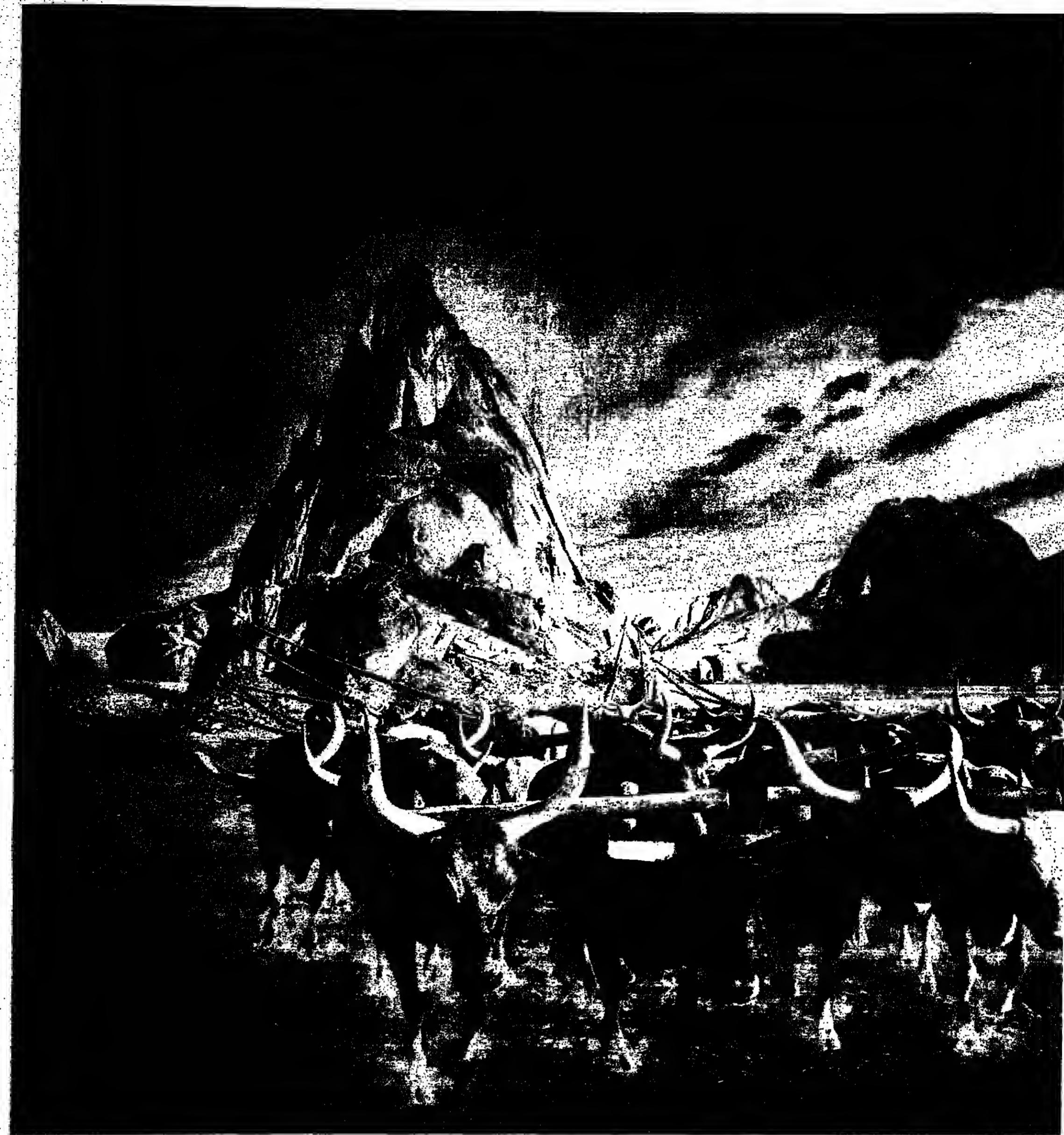


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## FORTIS DELIVERS IMPRESSIVE PERFORMANCE

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## 4 THE NETHERLANDS

LABOUR • by Barbara Smit

# Flexibility pays dividends

Pragmatic collaboration has contributed to an impressive rate of job creation

Since July this year, working weeks at Akzo Nobel, the Dutch chemicals producer, have been divided into "blocks". In principle, employees get twice as many days of leave as before. But the company may buy some of these extra "off" blocks in busy times, and employees may sell them by volunteering to work, with the manager's approval.

Akzo describes the system as "a box of Legos cubes with out a construction manual".

Though it may be too early to assess the merits of this particular arrangement, it illustrates a fast-moving trend towards shorter working weeks and more flexibility in the Dutch labour market. Such pragmatic collaboration between employers and trade unions has contributed to the impressive rate of job creation in the Netherlands.

ABN Amro Bank says the number of Dutch people in work has increased by 16 per cent over the past decade and a half, compared with an average of 4 per cent for the European Union. Last year alone, the figure rose by 110,000, and the social affairs ministry estimates it will have helped create 465,000 jobs in the four years to the end of 1998.

Some 15 years ago, trade

unions agreed to wage moderation in return for a shorter working week and a commitment to employment creation. The average working week was reduced from 40 to 38 hours, while the unions proved open-minded and consistently modest in their wage demands. This has since led to a 36-hour week for most civil servants and some private sectors, such as banking staff.

Meanwhile, The Hague adopted a string of labour market reforms that strongly stimulated the creation of so-called "flex-jobs", from temporary contracts to on-call jobs, that represent about 15 per cent of all Dutch employment, according to government estimates.

In the past three years, the number of flex-jobs has increased by a third, with the number of temporary contracts soaring by 75 per

cent. The proportion of temporary workers in the Dutch labour market thus reached an unusually high 3.5 per cent last year – more than double the level of Germany.

According to economists, this increased flexibility was made possible not only by specific deregulatory moves but also by the decentralisation of labour negotiations. Talks about wages and working conditions, that used to be held at national level, may now be conducted by individual companies to create packages that match their specific needs.

It was this shift that allowed Rabobank, for example, to push ahead with the

introduction of flexible work schedules. In line with collective labour agreements signed by the Dutch banking sector two and a half years ago, Rabo has reduced its working week to 36 hours. But it was also able to reach a special deal with the unions, as a result of which employees may, for example, be expected to work until 8pm without receiving overtime rates. The bank says a large share of the jobs created in the past two years were linked to the agreement.

At the same time, the government has created further job opportunities by engineering more general economic reforms, such as longer opening hours for retailers. Employment growth has been boosted by tax cuts as well as subsidised employment schemes that focused on the lower-skilled and long-term unemployed.

While acknowledging the progress that has been made, some economists point out that, in some sectors at least, labour regulations are still inflexible enough to deter foreign investors. They also question the security and the quality of the jobs that were created, arguing that low-skilled, subsidised jobs slow down the growth of Dutch productivity.

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EMPLOYMENT AGENCIES • by Barbara Smit

# Permanent position for temps

Companies are increasingly turning to "external flexibility"

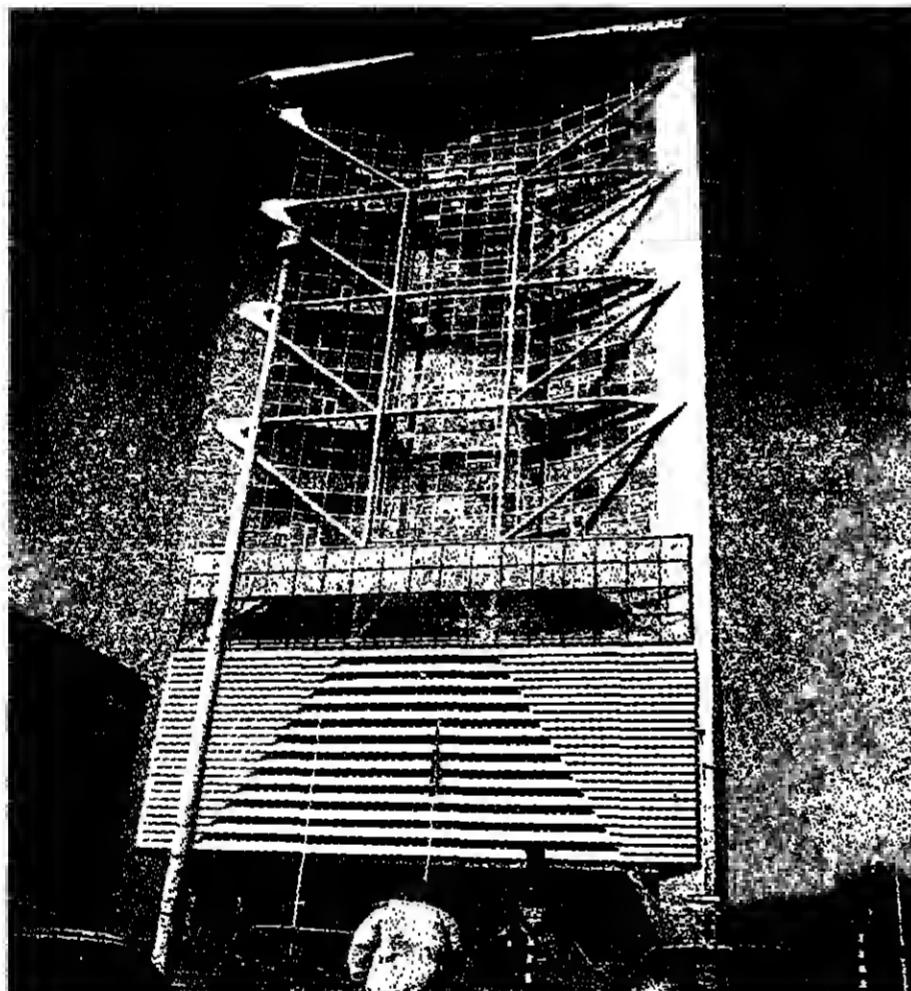
In June the flotation of Vedor, the Dutch temporary employment agency, was greeted with such enthusiasm on the Amsterdam stock exchange that the price range for the shares was raised at the last minute, yet they were still 30 times oversubscribed.

Vedor promises double-digit growth in its domestic market for the years to come as well as a foreign acquisition spree. Gert Smit, chairman, intends to double the company's Dutch market share to some 20 per cent within the next three years, while also increasing its European share from the current eight per cent to about 15 per cent in five to 10 years.

The listing of Vedor, a spin-off from the Vandex retailing company, has provided investors with an insight into the scope and the prospects of a domestic market worth an estimated Fl 9.4bn.

Vedor is the third largest Dutch temporary employment group, with sales of about Fl 5bn in this sector through a network of agencies in seven European countries. (The company also provides cleaning services.) More than half of these revenues come from France, the continent's largest market, where Vedor acquired Bis this year.

Overall the Dutch temping market grew by nearly 24 per cent last year, and although this expansion is expected to slow, most experts still forecast growth of about 10 per cent. "Demand is increasing at such a pace that some



The Malle Tower, home to the VNO-NCW, the Dutch employers' organisation. "Wage moderation and a shorter working week have led to increasingly flexible working arrangements" Photo: Lydia van der Meer

agencies are having trouble

power.

Meanwhile, temping has become a widespread and socially acceptable form of employment in the Netherlands. Roughly 3.5 per cent of the Dutch working population is hired through temping agencies, compared with only 1.5 per cent in France and less than 1 per cent in Germany, and analysts say the Dutch numbers could reach about 5 per cent in less than 10 years.

"Firing employees still entails very tedious and time-consuming procedures in this country," explains Mr Smit. "As a result Dutch employers gladly resort to temporary employment, an alternative that gives them some flexibility while also providing employees with very decent social protection."

Nowadays, a large part of the growth in the Dutch market comes from the shift

within the segment of "flexible jobs" that makes up about 10 per cent of Dutch work contracts. Employers are increasingly turning to "external flexibility" through temping agencies – instead of using internal instruments, so that temporary employment is growing at a much faster pace than the overall "flex" market.

Vedor is pursuing even quicker growth by focusing on the top end of the market, such as information technology, as well as sometimes downmarket specialities. For example, it has bought an agency that specialises in unskilled jobs for fruit and vegetable pickers. "This may not sound very glamorous but the service is so specific, including shuttles to pick up workers from home, that it still enables us to net very interesting margins," says Mr Smit.

Through a deal with the government employment services, Vedor has also gained access to unemployment files. "Making these people employable often requires as much professional training as psychological assistance, but the set-up is unique in Europe," says Mr Smit. In collaboration with the Start agency, Vedor hopes to create about 30,000 (subsidised and low-pay) assignments this year on the basis of this agreement. From next year the market should be further boosted by changes in labour regulations.

Under the proposed reforms, temporary employment agencies will have to offer their temps a permanent contract when they have completed assignments over a period of 18 consecutive months for a single employer, or after three years of regular assignments. On the other hand, the current rule dictating that a temporary contract may not last longer than three months

will be abolished. "This will force us to become employers ourselves, instead of just acting as intermediaries," says Spek Six, managing director of Adecco in the Netherlands. "But on the whole the reforms should have a positive impact on the market, because it will also help us to bind the temps to our agency." Besides, Mr Smit estimates that the proportion of temps who fail to obtain a permanent contract in three years reaches only about 5 per cent.

With a Dutch turnover of some Fl 800m last year, Adecco is the fourth largest player, making it the most prominent among the foreign groups who have spread into the country. Vedor admits that this international interest is adding to the pressure on margins and raising the price of domestic acquisitions.

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TECHNOLOGY • by Simon Kuper

# Betas start to edge ahead of arts graduate chiefs

Technical expertise has been seen as a slower route to a company car

The thing to be in the Netherlands today is a technician. That is because so few people are.

Pay for technical workers, from whizkids to the lowly skilled, is rising fast. Computer programmers, the rarest species of all, get phone calls from headhunters almost daily. Companies are so desperate to recruit them that one offered balloon rides as a lure; one balloon landed on the middle of a highway. Other companies simply offer their employees bounties as high as Fl 30,000 for bringing in new staff.

The automation sector, which has 200,000 employees, is estimated to need about 20,000 more specialists.

In the fast growing Dutch economy, with its official jobless rate of less than 6 per cent, the lack of technically trained workers could become the biggest bottleneck. Only 21 per cent of Dutch workers are estimated to have a technical job, compared with 30 per cent in Italy, Germany and Japan.

The Dutch historically do not make things. "In the Netherlands we can do almost nothing," jokes Leo Overmars, director of the Dutch bankers' association.

"We can't make capital goods. It's a disaster. But one thing we do very well: trade and finance."

Dutch companies supply South African coal to Turkey," marvels Arnold Vervuurt, an engineering profes-

sor at the Technical University of Delft. Yet he has written a report saying that the country needs twice as many technical workers as it produces.

The reason is that although the Netherlands is largely a service economy, its companies are avid users of computers. Internet use is among the highest in Europe and growing almost too quickly to measure. The "year 2000" computer problem and the approach of European monetary union has raised demand for programmers. As more companies automate their processes, the demand for technical workers is expected to rise permanently. In the past, demand for them just went up and down.

Some companies, such as the airline KLM, are coping with the shortage by farming out technical work to countries such as India. A few foreign engineers have come to the Netherlands. But importing labour is not seen as the solution, because few foreigners speak Dutch or understand the country's particular needs. A Dutch civil engineer, when starting a project, always considers the local water level, notes Mr Vervuurt. A German or Frenchman does not.

So how can the Netherlands start producing more technically trained people? "It's terribly difficult, because it's a cultural problem," says Paul Huijs, deputy director of technology policy at the ministry of economic affairs. Many Dutch people still regard technicians as workers in overalls doing badly-paid, dirty jobs

at heavy machines. "People think of types of work that haven't been done for years," says Mr Huijs. Perhaps for that reason, Dutch women are less likely than women in other countries to take technical courses.

Technical degrees are considered difficult, and are seen as a slower route to wealth and a company car than studying law or economics. "Why take a tough degree and become a physicist if you can take an easier degree and become his boss?" is a common question.

Technical work is seen as

"a one-way street just for nerds," says Joke van den Bandt, technology policy secretary at the VNO-NCW. "Every child says, 'Oh God, no!'" A computer company

based above her office finds itself compelled to fly in programmers from all over the world.

Perhaps the names say it best: arts students are known in the Netherlands as "alphas", while science students are "betas".

The government, companies and universities are running schemes to improve the image of betas. Professor Vervuurt has invited 60 school pupils to his faculty to talk about earth movements – not a Dutch specialty, he concedes, but a sexy subject. His university and companies are paying grants to some students to take technical degrees. Workers are being retrained.

But all groups agree that the solution must come from the market. When technical workers start earning more,

more people will enter the field. That, indeed, is just starting to happen. A report in 1995 showed that from 1985 to 1992 "alphas", whether highly skilled or not, earned more than betas. Low-skilled technicians earned 12 per cent more than their non-technical equivalents.

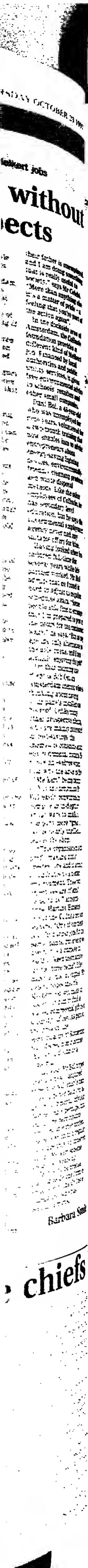
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## BIOTECHNOLOGY

The scientific choices are vast but making the right business decision is proving as vital as the development of a good product.

Daniel Green reports

## Corporate rules of natural selection

The biotechnology industry is poised between triumph and disaster, again. In the past few months company shares have collapsed, or shot up, depending on the progress of drug trials, alliances with the pharmaceuticals industry and the mood of the market. New company flotations have dried up in London but appear to have picked up in the US. Sales of the few products that are on the market have alternately disappointed and excited investors.

The forces that buffet the industry range from faith in science, to the confidence of the pharmaceuticals industry, through to stock market sentiment. Understanding how these forces change and interact can provide clues to where the industry will go next.

But first it is important to define "biotechnology". To scientists it means making molecular changes to living or almost-living things such as proteins. This could involve using powerful computers to design new proteins that can be used as drugs, or genetically engineering sheep to produce medicines in their milk.

But to governments, industrialists and investors, biotechnology is about start-up companies that use patented science to develop healthcare products.

The vast majority of these companies have been formed since the early 1980s when the US government began a programme to move the results of federally funded

scientific research into the private sector.

That coincided with a time when Californian venture capitalists were seeking new vehicles in which to invest the money they made in information technology. This collision of science and money has resulted today in 300 US biotech companies being listed on the Nasdaq exchange and at least 1,000 more being privately held.

In Europe, venture capital and an entrepreneurial culture are more scarce. Nevertheless, the number of European biotech companies grew 22 per cent between 1995 and 1996 to more than 700, according to accountants Ernst & Young.

This simple history conceals two decades of cyclical fortunes. In 1993 several drugs aimed at treating septic shock failed at the final hurdle before being submitted to drugs regulators. The subsequent capital famine lasted almost three years and led to job losses. Many young companies were driven to sell their development technology to the pharmaceuticals industry.

The rally, when it came, was short lived. Another, earlier this year, slowed when high profile drugs from Antimmune, Cambridge Neuroscience and others proved disappointing in final medical trials.

This time, the suppliers of capital rediscovered their courage within five months: between August 29 and September 30 this year, the average biotech stock in the US rose in share price by more

than 14 per cent, according to the industry newsletter *BioWorld Financial Watch*.

These gyrations are about more than share prices. Governments across the developed world increasingly see biotechnology as one of the growth industries of the 21st century. Germany has earmarked DM150m for the industry, and German biotech company Glagen is one of Nasdaq's 1997 stars.

Last year, the UK launched a government-backed "crusade for biotechnology" and already has the biggest biotech sector in Europe by far.

France this year pledged FFr1.5bn to support the industry. Genset, also Nasdaq quoted, has seen a rise in shares by almost half since January, thanks partly to a deal with Chicago-based diagnostics company Abbott Laboratories to apply genetics research to diagnostics.

So how should investors, employees or governments regard the sector's prospects? They cannot look to company accounts: with a handful of exceptions, biotech companies lose money. Their share prices depend not on current trading but on how research might turn out several years from now.

The experienced take several approaches, all far from foolproof. Most important is the use of the pharmaceuticals industry as an auditor of scientific strength.

Biotech companies are founded on scientific ideas developed over an extended period. They usually lack expertise in drug development

(putting new medicines through clinical trials) and marketing, but US research suggests that they are twice as efficient at turning research and development (R&D) into products as pharmaceuticals. They are hungry for cash from outside sources because they have no sales revenue.

Pharmaceuticals companies are among the richest in any industry but face a problem: their in-house research and development division are not producing enough new drugs to sustain growth rates. According to a survey by Andersen Consultants this month, the top ten companies need to improve R&D productivity no less than tenfold to hit their target growth rates.

The UK's Celltech has five such partnerships: with US companies American Home Products, Merck and Schering-Plough, with Germany's Bayer and the UK's Zeneca. Under the Merck deal, for example, Celltech receives up to £3m in staged pay-



ments as research progresses, and a royalty on products that go on sale. In return, Merck gets global marketing rights.

Such deals share both risks and rewards. Celltech has to share any profits with its partners. But the failure of the Bayer drug showed how partnerships are a cushion when disaster strikes: Bayer lost more than £100m, Celltech just a few million.

For most, such trade-offs are worth it. There is a minority, however, for whom this approach is not enough. They are inspired by California's Amgen, the world's most successful biotech company, founded in 1980 and now with a market value of \$13bn.

The chief executives of companies such as British Biotech, and Biogen and Tularik in the US, point out some of the disadvantages of powerful partners. Losing control of a project can be disheartening and sometimes damaging.

David Goeddel, Tularik's chief executive, has a solution: "We want to be a pharmaceuticals company."

This high risk approach has its fans. Tularik is a privately held Californian company whose last round of financing, with Swiss fund Pharma Vision 2000, valued it at an almost unheard of \$400m. Tularik does not even have its first compounds in clinical trials.

Mr Goeddel has three great advantages over other biotech chief executives: he is widely regarded as a genius, he has a strong record at Genentech, one of northern California's most

successful biotech companies, and his area of science is fashionable.

In science, different approaches are alternately hailed and dismissed. Some of today's favourites are:

- genomics, the detailed study of genes and their functions;

- gene therapy, where genes that cause a disease are replaced;

- gene chips, in which fragments of genetic material are attached to silicon chips and then to computers;

- signal transduction, influencing the way in which genes are switched on and off (Tularik's speciality).

The inventive nature of science combined with equity-based financing means that the biotech industry has an extraordinary resilience. Biotech companies can be continually renewed. If a project fails, a new one will be started with whatever cash is left, usually by licensing new research results from academia.

Science itself moves erratically, with many more blind alleys. There will always be disasters, but as long as there is progress and a method for transferring the fruits of such progress into private companies, biotech will promise triumph.

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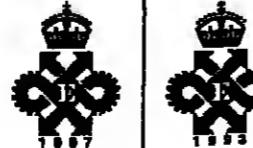
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Core	56.0
Ethical	34.8
Meconic	90.8
Peptide Therapeutics	112.5
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## 2 BIOTECHNOLOGY

UNITED KINGDOM • by Daniel Green

## Fission of business culture

The industry is multiplying faster than expected - but it remains difficult to predict

Nineteen ninety seven will go down as the year that the UK biotech sector got a dose of reality. At least that is the view of veteran US investors, who have long regarded the UK as the place that pays too much for biotechnology stocks.

For UK investors, the series of setbacks endured by companies as well known as British Biotech, Scotia and Celltech came as a nasty shock. Most companies, even those not delivering bad news, have suffered as bruised investors chose to park their cash elsewhere for the time being. The long-term prospects of biotech are hard to dispute, although this is of little comfort to those trying to overcome today's problems.

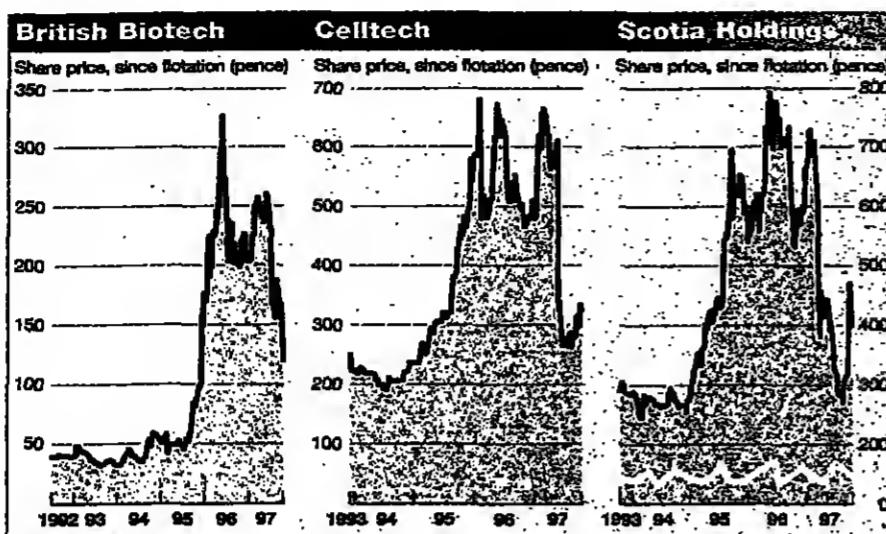
The misery of the UK biotech sector is not just about shareholders. The stockmarket is one of biotech's two main sources of capital (the other is the pharmaceuticals industry). Without robust performance from quoted companies, institutional investors hesitate to buy into new and rights issues. Indeed, the window for biotech flotations in the UK has been shut since late summer, and biotech specialists in banking and public relations are courting pharmaceuticals companies instead.

That could undermine one of the UK's fastest growing industries. Between 1994 and 1996, the number of biotech companies researching new drugs doubled, according to consultants Arthur Andersen. There have also been strong rises in the number of diagnostics companies and in those using biotechnology for agricultural and environmental applications.

And there is mounting evidence of the problems that are being caused to the sector. Several private biotech companies have postponed their flotations. Skye Pharma's rights issue in September - biotech's most recent capital raising exercise - had to be sold at 45p a share, compared with the 75p it mustered in a 1996 rights issue.

This amounts to the biggest cash crunch the UK biotech sector has faced in its 17 year existence. But biotech veterans have experienced difficulties before and believe that it is only a matter of time before the situation improves.

UK biotech was born on November 11 1980, offspring of the Labour government of the 1970s. Its siblings were Iunos and Nexus, semicon-



ductor and office automation companies respectively. All three were part of a government scheme to ensure that the UK participated fully in the commercialisation of new technologies.

Celltech's public sector childhood was not a happy one. The quality of research was high, but the company found it difficult to turn that science into products for clinical testing. By 1990, when the company was reorganized to make it more commercial, the private sector had produced its own biotech companies.

That first generation, including British Biotech, Xenova, Scotia and Celltech, came to the stock market market in around 1993. After a hesitant start, their share prices rose rapidly, attracting a much larger second wave of companies to the market last year.

Now there are 38 companies listed in London that can loosely be described as biotech. They range from British Biotech, with a market capitalisation of almost £1bn down to tiny Biofocus quoted on the OTC market and with a market capitalisation of about £1.5m.

Although this is still small compared with the 300 or so listed in the US, the breadth of approaches and technologies is comparable. More than half the quoted companies are searching for new drugs. Cancer is a popular target because it kills so many people and because existing treatments are not very effective. Other areas of research range from anaesthetics and asthma to schizophrenia and vaccines.

Some companies are selling tools to increase the efficiency of drug discovery, an area which has spawned some of the highest profile US companies. These range from software to design molecules and methods to speed up the selection of potential drugs from large numbers of candidate molecules.

through to genetics. Those not involved directly in drug research include companies in diagnostics, such as Dundee's Shield with a potential replacement for cholesterol tests, or in medical devices, such as Powderject's needleless injections.

The total makes the UK easily the biggest biotech sector in Europe. Only a handful of companies from continental Europe - spread between France, Germany, the Netherlands and Denmark - are listed, mostly on Nasdaq.

The UK industry is beginning to assume critical mass. This is because of the rapidly growing number of privately held companies, and an apparent change in attitude among academic researchers who once spurned the world of commerce.

A brief survey by the FT uncovered more than 50 privately held biotech companies at various stages of development. Some of these businesses consist of little more than a scientist and a patent looking for funding. But others are established businesses that in happier times would already have achieved stock market listing and respectable valuations.

The pace of growth is continually taking even senior insiders by surprise. A senior executive at Oxagen this summer believed he was joining the UK's only genomics (the application of the increased understanding of how human genes work) company. As the table in this survey shows, there are at least four such companies.

Fortunately for most of these companies, capital is pouring into early stage investment funds even as it is being withheld from public companies.

Most of the specialist UK biotechnology venture capital investors have raised new money this year. They

include Rothschild, Merlin, Abingworth, Reabourne, Apax, the Prelude Trust and a Medical Research Council fund.

At an even earlier stage, there has been a flowering of regional organisations devoted to fostering new biotech start-ups. They include the Scottish Biomedical Research Foundation, the Eastern Region Biotechnology Initiative, and a London biotechnology initiative. A brief survey is included separately on this page.

The trouble is that all these organisations ultimately rely largely on healthy stockmarket performances by established biotech companies.

Some might argue that good science will always find capital from the pharmaceuticals industry. But the US experience has shown that dull stock markets allow pharmaceuticals companies to buy biotech-invented technology cheaply.

So what, if anything, will restore confidence in public biotech companies? The answer is simple: success in

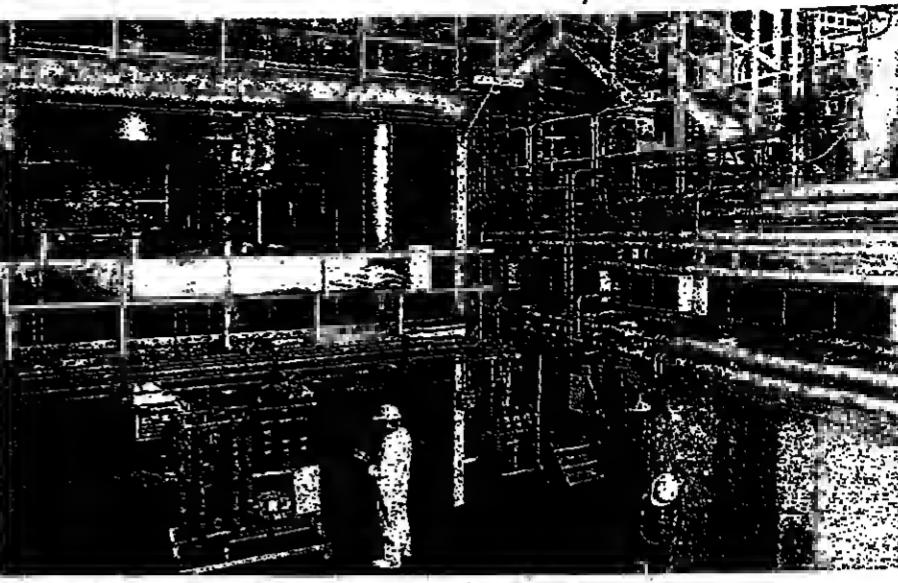
clinical trials and in convincing health regulators. Most of this year's trouble has been the result of failures in trials, especially from Celltech whose drug for septic shock failed in spectacular fashion in May. More than £100m had been committed to the project, largely by Celltech's pharmaceuticals partner Bayer.

The news over the next few months may involve partnership deals or regulatory approval for drugs from Cortecs, Scotia, Therapeutic Antibodies and others.

The real question mark lies over British Biotech's cancer drug marimastat. So many hopes are riding on its success that failure would cast a long shadow over the sector. Those results are expected in the first half of 1998, so any improvement in market sentiment between now and then is likely to attract a rush of flotation and rights issues to avoid the possibility that a marimastat failure would depress sentiment once more.

The only thing that is certain about the biotech sector is that there will be both pleasant and nasty surprises between now and marimastat's results. Some will come from the most unexpected of sources: in January this year one London-based biotechnology analyst said that shares in Scotland's PPL Therapeutics were not worth holding because no news of progress was expected for at least two years. Two months later Dolly the cloned sheep made PPL the most famous biotech company in the world. A couple more of those, and biotechnology will begin to live up to its billing as an important industry for the 21st century.

Turn to page six for a survey of the activities of UK biotechnology companies.



Celltech's fermenter used in the production of monoclonal antibodies

James Holtzman/Science Photo Library

## PROFILE

## A rivalry to attract new companies

## Regional investment draws biotech and the capital that comes with it

Such is the rate of growth in UK biotechnology that regional initiatives to promote it are springing up in many regions helped by government grants earlier this year to eight projects.

Scotland has been involved in exploiting its science base, and the cities of Oxford and Cambridge have long had science parks to attract biotech companies.

These locations are facing increasing competition for the investment that biotech companies bring. For example, Yorkshire council has joined forces with York

University to create Bioscience York to promote the region as a world-renowned centre of bioscience excellence.

The claim is based largely on the presence of medical devices companies Smith and Nephew and government research at the ministry of agriculture, fisheries and food's central science laboratory.

Across the Pennines, the Manchester Biosciences incubator plans to have its own £1m building attached to Manchester University's School of Biological Sciences.

Manchester University is investing £3.8m and its portfolio of biotech patients. But most of the funding will come from the private sector.

Meanwhile London - not normally thought of as an industrial location but

possessing the biggest concentration of scientific research in the country - has attracted a private sector programme called the Prospere Centre.

Prospere aims to offer laboratory and office space in short supply especially in the Cambridge area - as well as expert advice and access to finance. The plans for 75,000 sq ft of space are still at an early stage, however.

Cambridge and Oxford are set to fight back. Both have busy organisations running their own science parks.

Cambridge is set to get a boost from the Eastern Region Biotechnology Initiative. It covers six counties east and north of London and plans to spend about £200,000 a year promoting the region.

David Green

SCOTLAND • by James Buxton

## Clones make the world take note



A sheep's egg is injected with an adult udder cell at the Roslin Institute in Edinburgh

Development Agency which is part of Scottish Enterprise.

What is notable about the development of the Scottish biotechnology sector is that most venture capital funding comes either from companies based in England or from public-funded institutions, mainly offshoots of Scottish Enterprise. Few Scottish-based fund management companies are conspicuous investors in Scottish biotech companies.

Scottish Enterprise's biotechnology group usually makes equity investments of around £100,000 in companies. Along with Lothian and Edinburgh Enterprise it has put £250,000 into a fund set up at Edinburgh's Western general hospital by the UK-wide Medical Research Council to help new biotech companies.

Meanwhile, Scottish Enterprise and Si have launched the Scottish Technology Fund to provide capital to high technology ventures in various fields, including biotechnology.

Scottish universities collaborate in the Scottish Biomedical Foundation which attracts funding for research projects. The foundation recently arranged for Yoshitomi Pharmaceutical of Japan to establish a neuroscience research institute with Strathclyde and Glasgow universities - another vote of confidence in Scotland's scientific base.

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Agencies (the forerunner of Scottish Enterprise) and, later, by English-based venture capital funds led by Apax Partners. It had a bumpy history until its stock exchange flotation in 1993.

This year its shares leapt eightfold in a few days, before falling back, on hopes for Shield's new test for heart disease.

This year saw the flotation of Core Group, a drug delivery company which specialises in products aimed at improving the performance of existing drugs.

Core Group is based at Kilmarnock, south-west of Glasgow. Its lead product, a morphine suppository, is awaiting regulatory approval in the UK. The company owns the licence to a substance taken from other sheep.

Dolly, whose existence was revealed early this year, was produced by PPL Therapeutics, a biotech company based in Midlothian, and the nearby Roslin Institute, a publicly-funded research institution.

Scotia is one of the UK's three main clusters of biotechnology, the others being the Cambridge area and the London-Oxford corridor. Scottish Enterprise, the development agency, reckons there are 43 biotechnology-related companies in Scotland, employing 5,382 people - two and a half times more than in 1993.

John Bremner, head of the biotechnology group at Scottish Enterprise, points like Dr Horrobin, to the universities as a key to Scotland's strengths in the sector. Universities in Scotland produce a higher percentage of biotechnology-related graduates than others in the UK.

Biotechnology-related departments at Glasgow, Edinburgh, Dundee, Strathclyde and Heriot Watt (also in Edinburgh) universities score highly in external assessments of their performance, with Aberdeen, St Andrews and Stirling not far behind.

"Most new biotech companies

## BIOTECHNOLOGY investment IN A global PERSPECTIVE

Biotechnology is a world industry; so biotech investment for capital growth must also take a worldwide perspective.

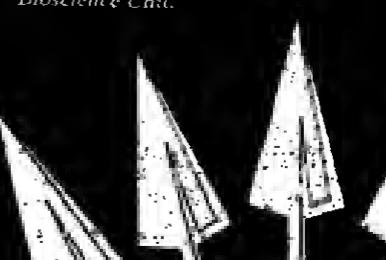
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## AGRICULTURE • by Alison Maitland

## From bare facts to nervous optimism

The angst over genetically altered food has led to tensions between the EU and US.

Genetic engineering of food crops stirs powerful emotions. This month, a small group of people stripped naked on the roof of a London advertising firm which is promoting Monsanto, the US biotechnology company, by communicating the benefits of genetically modified farm products.

The activists, from the Genetic Engineering Network, a coalition of organisations opposed to genetic engineering, said they wanted to expose the "naked truth about the genetic cover-up".

Eye-catching stunts have abounded across the European Union in the past year. Genetically engineered crops and foods are becoming more common, and so are protests by environmentalists.

Tomato paste was the first high-profile entry on to the market two years ago, made from tomatoes that stay firm longer. Because processing cost less, the paste was

cheaper and retailers reported little resistance to the clearly labelled cans.

For some time, genetically modified (GM) micro-organisms have been used to produce an alternative to calf rennet to make vegetarian cheese. In the US, other modified crops that have won regulatory approval include potatoes, squash, oilseed rape and cotton. There has been no consumer uproar and many farmers appear to have adopted them enthusiastically.

But two crops originating in the US have focused the attention of governments as well as "green" groups on the drawbacks of agricultural biotechnology. They are a soybean developed by Monsanto to resist treatment with Roundup, its glyphosate herbicide, and maize engineered by Novartis, the Swiss biotechnology group, designed to kill the devastating European corn borer pest.

Both offer financial and practical benefits to farmers and have been approved as safe for human and animal consumption by the European Commission. But concerns remain. One is that the maize, modified with an antibiotic-resistant "marker" gene, might confer resistance in animals and then humans, though scientists consider the risk to be tiny.

Another concern is that genes in modified crops that are resistant to weed killers may jump into nearby plants, creating "superweeds" that will need to be treated with more powerful chemical sprays. Recent trials of modified oilseed rape in Europe showed its herbicide resistance spreading into surrounding conventional crops.

The soybean is also controversial because of its pervasiveness in processed food. An estimated 50 per cent of these foods contain soybeans or their derivatives. European farmers, retailers and consumer organisations say the altered soybeans should be segregated so that consumers can choose. The US industry has refused to segregate on the grounds of cost and logistics.

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Austria and Luxembourg have threatened to take the commission to court for ordering the lifting of its import ban on the maize.

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The angst over maize and soybeans has led to trade tension between the US and the EU. But are European consumers really worried?

Opinions vary from country to country. Groups opposed to genetic engineering say most consumers back them.

The biotechnology companies say consumers tend to feel more positive the more they know about the immediate environmental benefits, such as the drop in chemical use. Monsanto estimates US cotton growers used 250,000 gallons less insecticide last year thanks to its boll-weevil-resistant

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## PATENTS • by Diana Sternfeld

## Legal debate widespread

Ownership of man-made life, as an alternative to nature, excites strong opinions.

Genes are the codes that define living things. Some say "they are life itself". These kinds of sentiments help explain the public debate surrounding genes, not least in respect of their patentability. This is an area normally viewed as highly technical, exciting interest only in dry and dusty patent lawyers.

Patent law treats genes and genetic engineering in just the same way as any other invention. To be patentable in Europe (as covered by the European Convention), such an invention must be:

- new;
- not "obvious";
- capable of industrial application; and
- "patentable subject matter".

To be considered new, an invention must add to the current state of knowledge. A new method of isolating a gene, or an isolated gene with a new activity, or a new industrial use for a gene may fall into these categories and be patentable.

A gene, as it occurs in a natural element such as the human body, will not be. It is not new - it has existed as part of the human genome since the beginning of life.

An invention is not considered obvious if what could be referred to as the "inventive step" of the patent would not have been clear to the average specialist in the field. The European Patent Office deals with this by looking at inventions as technical solutions to technical problems. For example, were the tools employed in the invention already available to the inventor and, more to the point, would he or she have used them?

If the invention can be made or used in any kind of industry it will be considered capable of "industrial application". In the field of



Cloned animals, like this calf, cause stir in the legal world

biotechnology this means if a technical purpose for an invention is not described - even if it is not the purpose for which it is ultimately used - it is not patentable. Patentable subject matter is defined by exclusion. Any:

- discovery;
- scientific theory;
- variety of animal or plant; or
- invention contrary to "order public" or morality.

exclusions. The "morality" argument has formed the basis of widespread debate, exciting strong opinions and much controversy. Patent law would not seem to be the most appropriate forum to determine issues that, as with many developing sciences, require public debate and which may ultimately lead to guidance and legislation from both national and international bodies.

Very recently, the Council of Europe instructed its executive to formalise a ban on the cloning of human beings in a protocol to the European Convention on Biomedicine.

The issue on the "variety" exclusion is whether genetic engineering is a technical, biological or microbiological process and, thus, whether a genetically engineered plant or animal is a "variety".

Genetically engineered plants or animals, including transgenes such as Polyc the sheep, are those that have been created or modified by a technical or microbiological process usually brought about by human intervention.

The natural biological processes of the plant or animal have also had a role to play in the creation of the

genetically engineered plant or animal. It is because of this that there are arguments about whether a genetically created plant or animal is a "variety" within the meaning of the law and, therefore, should not be patentable.

In the Harvard Oncomouse proceeding before the European Patent Office, it was decided that animal and plant varieties are excluded from patentability, but not animals and plants per se. As the Oncomouse - a mouse engineered to develop cancer - was held not to be an "animal variety" it could, therefore, be patentable. The decision rests on what constitutes patentable subject matter, and specifically, what forms a "variety".

The US position on patenting of genes and genetic engineering is, perhaps, better defined than in Europe. The "living character" of inventions does not prevent them being patentable subject matter. The question to be answered is whether the invention constituted a "manufacture" or a "composition", whether in effect it was "man-made" regardless of it being a life-form. Therefore, genetically engineered plants and animals are considered patentable subject matter.

A European Union directive on the Legal Protection of Biotechnological Inventions has been under debate for some time now. That directive is aimed at harmonising the manner in which member states deal with biotechnological inventions and ensuring that national laws permit patent registrations for biotechnological inventions which meet the criteria to be patentable.

When these outstanding issues are resolved, either by the legal forums or legislation, the interest in this aspect of these exciting new industries may decline - and it will revert to the hands of those dry and dusty lawyers.

Diana Sternfeld is a partner with UK solicitors Stringer Saul, specialists in pharmaceuticals and biotechnology.



Genetically altered tomato paste is sold in British supermarkets. Enhanced fruit and vegetables may be available soon

Cathryn Atkinson

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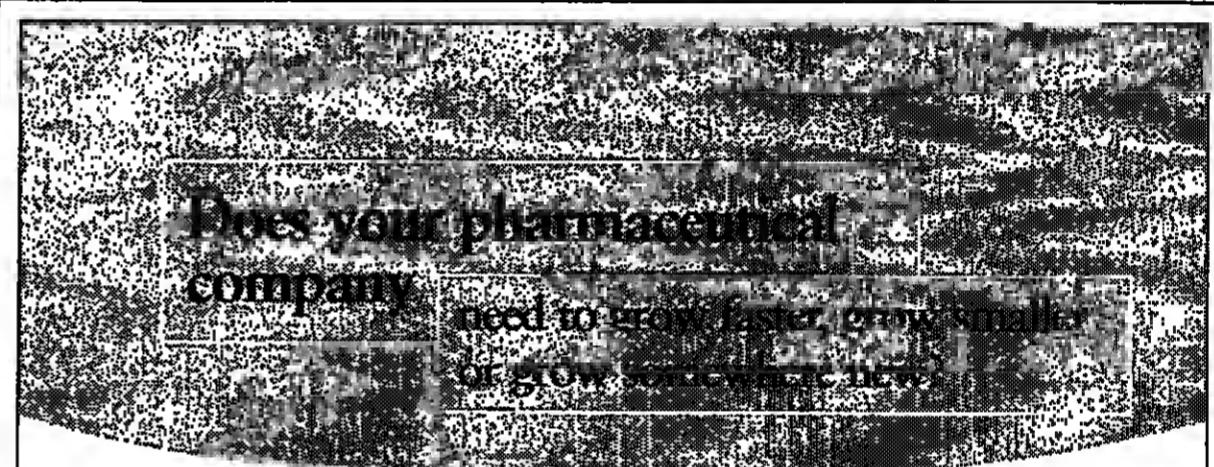
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The BIA exists to encourage and promote a thriving, financially sound sector of the UK economy built upon developments across the biosciences to create economic growth, employment and an expanding skills base. Its Board of Directors includes Chief Executives of the UK's most important biotechnology SMEs and aims to create an environment that maximises development of the UK bioscience sector.

At the Business Issues conference, delegates will receive a copy of the BIA's Annual Review 1996/97.

Others interested in receiving a copy, can do so by contacting the Association on (tel: 0171 565 7190 or fax: 0171 565 7191).

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## 4 BIOTECHNOLOGY

CALIFORNIA • by Daniel Green

## Too crowded for comfort

Hundreds of companies need support over the long term - a difficult quest

There are 32 stock market listed US biotechnology companies beginning with the letter A. With more than 300 companies in the sector as a whole, and no more than a handful making a profit, it is not surprising that some in the US are asking whether the sector is overcrowded and overblown.

A quick back-of-the-envelope calculation shows why. Estimates of the number of biotech companies in the US range up to 2,000. The costs of developing a new drug are roughly \$400m (although estimates range from \$100m to \$800m), and pharmaceutical industry precedents suggest that only a drug with peak annual sales of at least \$350m is a clear money spinner for the company that invented it.

Most of those 2,000 companies are developing more than one product, but each company, in a general sense, would be a success if only one project came to fruition. So for all 2,000 to become profitable businesses, they would require an overall investment of \$800bn and produce peak annual sales of \$700bn.

The biotech sector is not alone in trying to find new medicines. The mainstream pharmaceuticals industry is pumping in at least 10 times the biotech industry's research and development budget into its own R&D.

Since the entire US healthcare system today costs about \$1,000bn a year to run, of which less than one-fifth is spent on drugs, it is clear that taxpayers can only afford to pay for a small fraction of today's biotech companies to be successful.

One biotech venture capitalist likens it to the great railway boom in Victorian Britain where more than 400 railway companies were formed between 1846 and 1848. Rapid consolidation followed and a century later



Dozens of companies are established near San Francisco. (John Green)

there was just one. (Today the figure is 28 as a result of rail privatisation.)

If biotechnology is to evolve along similar lines, then the first people to notice would be the bankers and venture capitalists. These professions rely on the existence of a voracious stock market appetite for the hundreds of biotech companies with which they are involved. Without this appetite, they could not realise their investments or make the fee income that is their living.

At first sight, the members of these groups confirm the oversupply of biotech companies. "We need fewer biotech companies, not more," declares Michael Dovey, managing director of the healthcare group at Montgomery Securities in San Francisco.

"There are too many companies in drug discovery," agrees Bob Curry of Silicon Valley venture capitalists Sprout Group.

Even Brooke Byers, senior partner in the best known Silicon Valley biotechnology venture firm, Kleiner Per-

kins Caufield and Byers, says: "Are there too many companies? Yes, in some areas there are too many overlaps."

One logical consequence of this population boom would be a wave of mergers and acquisitions (M&A) to take out the weaker companies. Indeed, some bankers are positioning themselves for a burst of M&A, and at least one large investor in the sector is said to be considering a biotech "vulture" fund to foster and make money out of industry consolidation.

But the reality may not be so simple. For Mr Byers, the explosion in biotech is far from over; it is just the emphasis that is likely to shift. "There are not many untested areas in drug discovery biotechnology. But there are new areas such as diagnostics, gene expression and toxicology profiling."

Besides, he says, "20 years is not very long for a scientific revolution. Genomics will create another wave of start-ups, and we are seeing the emergence of tools, as opposed to discovery, compa-

nies, is turning some investors away from the sector entirely.

Sam Colella at Institutional Venture Partners (IVP), is frustrated by biotechnology's inability to generate anything near the success of information technology.

"The issue is that biotech returns are much less than those in information technology. The people who make the money are transaction people [such as bankers and lawyers]. It's OK, but not great for entrepreneurship and venture capitalists."

IVP has roughly twice as many information technology investments as biotech, and its latest fund is even less heavily weighted in biotech than that, says Mr Colella.

It is not easy to tell a biotechnology entrepreneur to put a troubled company up for sale. Biotech companies cannot go bankrupt because they have no debts (their cash comes from equity sales to investors and periodic payments from pharmaceuticals industry partners.) Without creditors, there is no one who can threaten to wind up the company, and a board of directors dominated by executives is unlikely to vote for its own demise.

For such reasons, even a banker like Mr Dovey is pessimistic on how much M&A will actually take place.

"Most biotech companies don't want to be owned," he says. "Most pharmaceuticals companies don't want to own them [because their small size contributes to their productivity and there is every risk that the brains will leave if the company is acquired]."

"They should be giving money back to shareholders if they fail, but they don't. They'll do something else with the money," he says. "Biotech companies don't go bankrupt because they have no debt, so they could be walking wounded for a decade."

And this kind of behaviour, along with a measure of frustration over how biotechnology has failed to produce many billion dollar

companies, is turning some investors away from the sector entirely.



Monoclonal antibodies hold potential for diagnosis and treatment of disease. They are obtained by fusing a normal antibody-producing cell with a rapidly-multiplying tumour cell. (Jerry Baum/Science Photo

## Sharpshooters are ready for viral army

Monoclonal antibodies are at last being used in practical applications

Antibodies are the body's "magic bullets" against foreign invaders. The immune system has the capacity to design and make trillions of different antibody molecules, each shaped to recognise and destroy a specific germ or toxin.

Scientists have dreamed for 100 years of adapting nature's method to give the body extra ammunition to fight disease. This became a practical proposition in 1975 when Cesar Milstein and Georges Kohler at the Laboratory of Molecular Biology in Cambridge invented "monoclonal" antibodies. This opened the way for researchers to make billions of identical copies

of an antibody aimed at a specific target.

Until the 1990s, the practical application of monoclonal antibodies failed to live up to the hype that had greeted their discovery. For various reasons, antibody-based drugs ran into unexpected problems in the clinic and the first ones are only now coming on to the market.

The most important problem with the original monoclonals was that they were derived from mice. The patient's immune system tended either to develop an allergic reaction or to destroy the antibodies before they could reach their target. But recent research by companies such as Cambridge Antibody Technology (CAT) has developed antibodies that recognise as human.

Antibodies are used in research as part of the drug discovery process or for diagnosing and treating disease. According to CAT, they can help researchers discover where in the body a particular molecule is made, where it acts, which other molecules it is associated with and whether it is involved in a disease.

Antibody-based biological agents, designed to home in on cancer cells, can give doctors a more accurate diagnosis of a tumour than traditional methods. Several antibody drugs are either on the market or about to reach it. The biggest seller so far is Progesterone developed by Centocor and marketed by Eli Lilly; it is targeted at platelets, the blood particles responsible for clotting, and reduces the incidence of heart attacks following surgery to reopen blocked arteries.

Clive Cookson

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Published in March 1997, this directory contains full financial information on 265 biotechnology companies with substantial analysis on company activities and listings of the main product portfolio for each company.

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GERMANY • by Sarah Althaus

## A fledgling decides to fly

The government is taking an active part in ensuring future growth by providing funds

Germany has made a remarkable about-turn in biotechnology in the last few years. After sitting out on the global biotech revolution in the 1980s, it is now embracing the industry as one of the leading technologies for the next century.

Ironically, much of the credit for this change of heart lies at the door of what for most of the last decade was one of the sector's worst enemies: the German government.

For years, tough regulation and government neglect stifled activity in German biotechnology and helped stoke hostility towards the sector among the country's environmentally-conscious public.

Today, spurred on by the highest unemployment levels since the second world war, the government has relaxed rules on genetics technology and wants to take all steps to ensure that Germany becomes the European leader in biotechnology by 2000.

Admittedly, Germany's fledgling biotech sector is far smaller than that of the US or UK, and has few commercial success stories. But the German government is taking a more active role in biotechnology than any other in the world and is pouring an annual \$800m into various programmes aimed at developing the industry.

The campaign is paying off. With public hostility towards biotech on the wane, accountants Ernst & Young say the number of German biotech groups leaped to about 104 last year, compared with a handful in the early 1990s.

By year end, Jürgen Rüttgers, minister for science and technology, estimates Germany will have about 300 biotech groups, albeit mostly tiny and at an early stage of development. "We have



Science and technology minister, Jürgen Rüttgers

finally released the hand-brake," he says.

One of the main impulses for the explosion was last year's "BioRegio" competition, under which the government awarded a total of DM150m in special financial support to three regions to encourage the development of biotech.

Funds from the competition, which lasted more than a year and pitted 17 regions against each other, will be awarded over the next five years to help support projects around Munich, in a region of the Rhineland around Aachen, Cologne, Düsseldorf and Wuppertal, and in the "Rhine-Neckar triangle" area around Heidelberg, Ludwigshafen and Mannheim.

In addition to the Bonn funds, large amounts of soft money are available from state governments to help biotech start-ups. For example, Bavaria, which is rapidly becoming Germany's

Even Hesse, where the

Gree party is dominant, has had a change of heart, recently sending a 26-member government delegation to the US to research ways of promoting biotechnology and risk financing in the sector.

"Resistance to biotech is crumbling even in regions [of Germany] where it was once strongest," says Ulrich Aldag, chairman of Evotec Biosystems, a Hamburg-based group co-founded by Nobel laureate Manfred Eigen.

This new-found support from the government has given the sector a considerable boost of confidence. Hoechst, one of the large chemical groups forced to shift most biotechnology activities abroad in the 1980s because of fierce resistance from environmentalists and politicians, has recently returned to open a genetic research laboratory in the Munich biotech centre.

Schering, meanwhile, has established a therapeutics venture, Metreon, with Cellgenix, a Freiburg-based gene therapy group, in Freiburg, and BASF has set up a biotech venture in Heidelberg with Lyne Therapeutics of the US.

At the same time, the entrepreneurial sector is expanding rapidly, with 93 start-ups in the first half of 1997 alone.

Furthermore, more established groups, such as Morphosys, Evotec, Medigene, a Munich-based therapeutics group specialising in cancer and heart disease, and Anticancer, a Berlin-based biotech group, are seeking stock exchange listings in the next 12 months.

"Germany's biotech fever has taken hold with an increased vehemence over the past 12 months," says Rüdiger Marquardt, spokesman for Dachema, the Frankfurt-based association of German biotech companies set up late last year.

A number of recent success stories have further improved sentiment. Take, for example, Düsseldorf-based Qiagen, the world leader in products for the separation and purification

of nucleic acids, whose shares have more than quadrupled since it became the first German company to list on Nasdaq last year.

Evotec, which earlier this year signed a collaboration pact with Novartis of Switzerland and Smithkline Beecham of the UK, worth up to \$30m for the Hamburg-based group. Or Morphosys, which in March linked up with Pharmacia & Upjohn, the Swedish-US drugs group, in a research agreement worth up to \$50m for Morphosys.

Notwithstanding a few criticisms - that the government should concentrate its funds on a few big biotechnology projects rather than encourage hundreds of tiny ones, or do more to help young high-tech companies by allowing stock options for employees - German biotechnology is blooming.

## A library full of the blueprints of life

Genomics makes easy the reading of genes, addressing many health issues

The Human Genome project is a loosely co-ordinated international endeavour, with funding of several billion dollars from public and private sectors, to work out the structure and sequence of the genome - all the DNA that provides the blueprint for a human being through a four-letter chemical alphabet (A, T, C and G).

The project was launched in 1990 and experts expect that, by 2005, any scientist will be able to access a public database and read the complete sequence of 3bn chemical letters in the genome. This includes an estimated 80,000 genes, the basic units of heredity.

Genomics is the medical application of this knowledge - the way the genes work together with environmental factors to determine human health and sickness. The large-scale commercialisation of genomics began in 1992 when a new company, Human Genome Sciences, was founded in the US to collaborate with the non-profit Institute for Genome Research in the search for important genes.

Since then, dozens of genomics companies have been set up, and genomics is probably now the hottest area of biotechnology. The essential features of genomics research are to:

- identify a gene (or genes) associated with a particular disease;
- evaluate a diagnostic or therapeutic target based on the gene;
- develop tests and/or drugs that fit the target.

But there are several different approaches to genomics research.

One category of company specialises in large-scale sequencing, following the lead of Human Genome Sciences, and produces databases with information about thousands of active genes. There is an opening here not only for human but also bacterial genomics - looking for genetic chunks in the armour of bacteria, as part of the search for better antibiotics.

Another type of genomics company looks for the genes that cause specific diseases, through genetic analysis of affected families.

Isolated, genetically homogeneous populations with good medical records are ideal for the purpose - so DeCode Genetics, based in Iceland, seems to be in with a good chance.



Study of gene charts are the core of genomics AGA Technology

A third and more diffuse group of companies concentrates on "functional genomics" - working out the function of specific genes in the body's various biochemical pathways. Some, like Affymetrix, have developed array technologies or "gene chips" to analyse which genes are expressed (switched on) in particular tissues. Others take advantage of similarities between the biochemical pathways in humans and simpler model organisms, such as yeast, fruit flies and nematode worms.

Clive Cookson

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## Tagged with great interest

Combinatorial chemistry is poised to be the next big wave in development

Combinatorial chemistry is the most exciting new chemical research technique of the 1990s. It miniaturises and automates chemical synthesis, creating a huge diversity of compounds by combining a fixed stock of molecular building blocks at random through a planned series of reactions.

The chemist's traditional approach is to devise the most efficient route to a single pure compound. In contrast, the combinatorial technique makes a huge "library" of compounds - each with an identifying "tag" - at one go.

Combinatorial chemistry has taken pharmaceutical and biotechnology research by storm. Companies use it in the discovery process to make thousands of new



Observing robotic drug testing used in combinatorial chemistry, which is taking the industry by storm Peter Mangan/Science Photo

compounds a week for testing in automated "high-throughput screens". These are designed to detect signs of activity against biological targets (such as enzymes or cellular receptors). The technique is also useful in

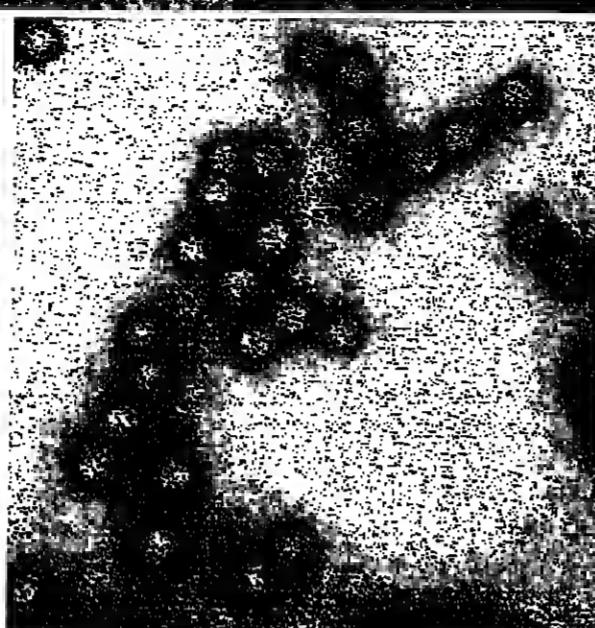
agrochemical research to identify compounds that might make useful pesticides or weedkillers.

Although it is too soon for products discovered through combinatorial chemistry to have reached

Clive Cookson

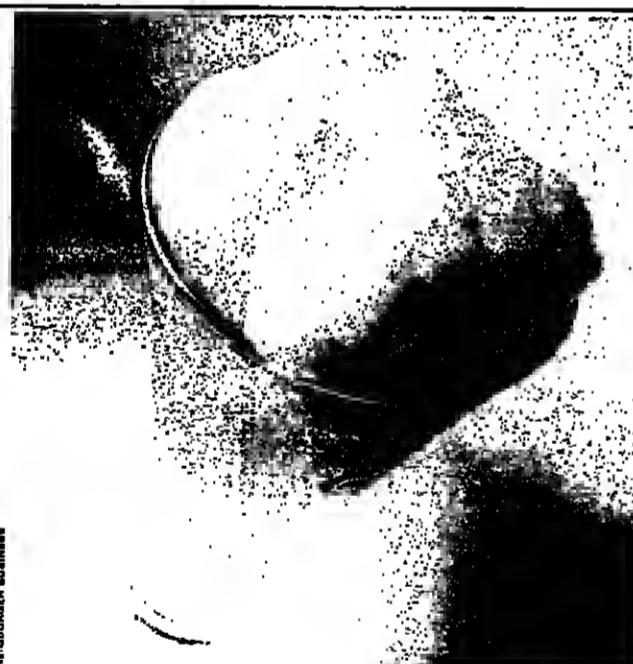
## 6 BIOTECHNOLOGY

## UK biotechnology companies



Company	Area	Approach
London stock exchange listed		
Biocomposites	Coated devices	Implants in heart disease/contact lenses
British Biotech	Drug discovery	Cancer
Cambridge Antibody	Drug discovery	Antibodies
Centab	Drug discovery	Immunology
Celltech	Drug discovery	Antibodies
Chimocience	Drug discovery	Specialty purified drugs
Core	Drug delivery	Morphine and more
Cortics	Drug delivery	Proteins, such as insulin, in pills
Drew Scientific	Diagnostics	Diabetes
Innovative Technologies	Wound care	Super-bands
ML Labs	Drug/device development	Diabetes/asthma/Aids
Oxford Molecular	Software for drug discovery	Sells to big pharma
PPL Therapeutics	Drug manufacture	Using transgenic sheep
Peptide Therapeutics	Drug discovery	Vaccines
PhytoPharm	Drug discovery	Eczema/many
Powderject	Drug delivery	Needleless injection of powders
Protexus	Drug discovery	Several
Scotia	Drug discovery	Using lipid/cancer
Shield Diagnostics	Diagnostics	For heart disease
Shire	Drug discovery/marketing	Alzheimer's/hormonal
SkyePharma	Drug delivery/genetics	Many/genetics
Tepnel Life Sciences	Diagnosis	DNA testing
Therapeutic Antibodies	Drug discovery	Antibodies in snakes/els
Vanguard Medica	Drug development	Migraine etc, licensed from big pharma
Xenova	Drug discovery	Cancer/products from natural sources
Aims, Offer or Nasdaq listed		
Altzyme	Drug discovery	Obesity
AspTech	Devices	Heart valves
Biofocus	Drug discovery services	Sells to big pharma
Chemical Design	Software for drug discovery	Many
Electrophoresis	Diagnostics	Extended release formulations
Ethical Holdings	Drug delivery	Blood transfusion
Heinecke	Devices/marketing	Sheep antibodies for human use
KS Biomedix	Drug discovery/development	From carbohydrates
Mediays (formerly Biofocus)	Drug discovery	Retractable needle
NMT	Devices	Gene therapy
Oxford Biomedica	Drug discovery/delivery	Modified proteins
Polymer	Drug discovery	Single drug; several trials
Stanford Rock	Drug development	

Company	Area	Approach
Proteins held in selection		
Aditech	Drug discovery	Drug development
Alphacore	Antibodies	Drug discovery
Anticore	Antibodies	Drug delivery
Andres	Antibodies	Drug discovery
Avia Genetics	Biologics	Drug delivery
Biotesting	Biotesting	Drug discovery
Biotesting	Biotesting	Manufacturing services
Brix Genomics	Cambridge Combinatorics	Drug discovery
Captivis	Captivis	Drug discovery services
Cambridge Genomics	Cancer	Drug discovery
Careus	Careus	Drug discovery/development
Celltech	Celltech	Drug discovery
Colin Bioscience	Cytokine	Drug discovery
Edenite	Edenite	Drug discovery
Europa	Europa	Discovery services
Genfit	Genfit	Discovery services
Genitex	Genitex	Discovery services
Hoefl Rademacher	HSK	Drug discovery
Kindred	Kindred	Drug discovery
London Biotechnology	Microgen	Drug discovery
Microgen	Microsciences	Drug discovery
Microgen	Neurogen	Discovery services
Onyxix	Oxygen	Drug discovery
Oxford Alimentary	Oxford Alimentary	Drug development
Oxford Gene Technology	Oxford Gene Technology	Discovery services
Oxford Glycosciences	Oxford Glycosciences	Drug discovery
Quadrant Healthcare	Quadrant Healthcare	Drug delivery
Repligen	Repligen	Drug delivery
Pharmegen	Pharmegen	Drug delivery
Prolifit	Prolifit	Drug delivery
ReNeuron	ReNeuron	Cell therapy
Biologics	Therapys	Drug discovery
Therapys	Western Medical	Drug discovery/delivery
		Drug delivery



**With applications like this, no wonder Copenhagen is big on biotech**

Copenhagen's entry into the biotech sector came in 1980 when Emil Christian Hansen was among the first to develop yeast cultures used in the fermentation of Carlsberg beer. Since then interest and competence in the region has grown.

**EUROPE'S BIOTECH CENTRE**  
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## In Perfect Balance

According to the ancient Chinese philosophy of yin and yang, the universe is composed of opposing but interdependent forces. Interestingly, this philosophy resembles the concept of homeostasis, the natural balance that occurs within living organisms, including the harmony between antagonists and agonists that regulate vital functions. Thus, an important factor in the search for new medicines is developing compounds that work together with the body's own restorative and regenerative abilities. To lead healthy lives, we must seek balance with nature, with society, and within ourselves. As a leading pharmaceutical company, Takeda is striving to help people attain this balance.

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